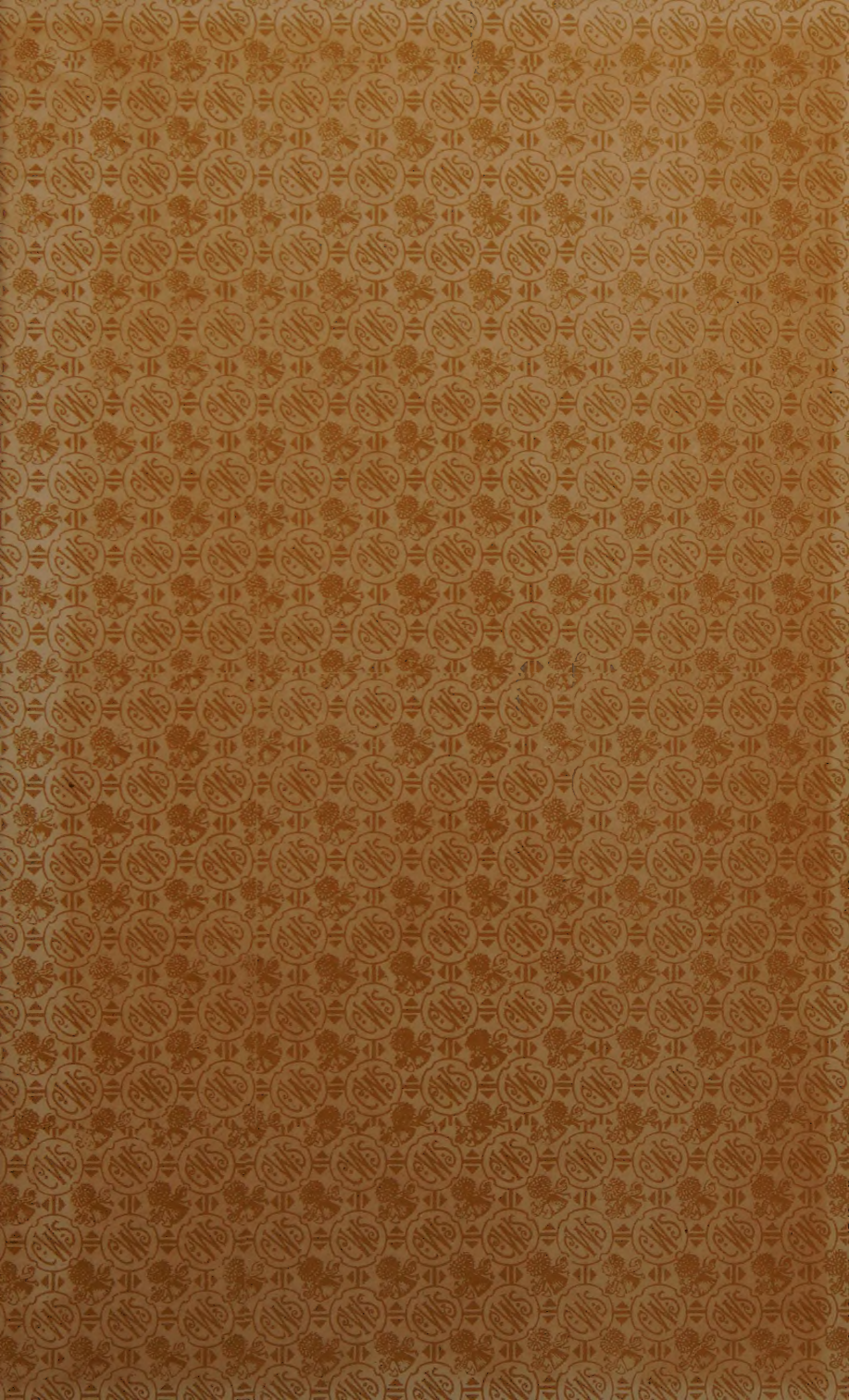


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THE
CO-OPERATIVE WHOLESALE
SOCIETIES LIMITED.

ANNUAL

1915.

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CO-OPERATIVE WHOLESALE
SOCIETY LIMITED

ANNUAL

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PREFACE.

AT the time of writing most of the European nations are at deadly grips, death and devastation are daily increasing, and none can discern the end. Still, we deem it well to publish our *Annual* as usual, for the principles and truths of co-operation are steadfast, and to divert the minds of readers from the carnage of battlefields to the social problems that still await solution is to render a real service.

The main features of this volume are little altered from those of its predecessors, but among our illustrations will be found some interesting photographs of estates acquired by the C.W.S. in further development of its positions as farmer, landowner, and fruit grower.

In writing of "Women in Industry," Mr. James Haslam wisely devotes his efforts to presenting "the living facts as we have them before us at this moment." The exploitation of female labour, the remarkable increase in the numbers of women and girls employed in trades previously monopolised by males, and other phases of the subject are presented in a vivid and impressive form. The article proves itself an invaluable contribution upon an urgent social problem.

Mr. Money's intention in writing upon "Our National Wealth: The Conditions of its Continuance" is "to trace in broad outlines the circumstances which have made Britain what she is, and to show in their true perspective the factors which constitute our strength or our weakness." Touching upon the rise of Britain as an industrial power due to our great national assets in coal and iron; Mr. Money passes on to deal critically with the national wealth, its distribution and the comparative failure of production. At the close of a live and stimulating article, the author's conclusion is thus stated: "Co-operation . . . can eliminate all unnecessary costs, and, informed and inspired by scientific management, produce the greatest amount of material wealth with the least expenditure of labour."

The views expressed by Mr. H. M. Richardson on Continuation Education are no doubt controversial. It is well that opinions contrary to the popular conception of the value of such education should be heard and considered, and the appeal is made to

Preface.

co-operators for a new estimate of the aims of knowledge. He says: "The nation which first teaches its democracy to think, to know itself, its history, its conflicting potentialities, the why and wherefore of social disturbances—that nation, in the course of a few generations, will be, if not the greatest, the happiest in the world."

Within the compass of twenty-six pages Mr. Pollard contrives to give very interesting glimpses of the great civilisations of the past, touching upon their rise and decline and their main characteristics. The relative positions of the peoples of the various nations to their rulers are explained, and parallels and comparisons drawn between the conditions prevailing among these ancient peoples and our own time, besides much information as to their habits and customs.

Of the special articles that by Mr. H. Clement Gray, on "The Cost of Living," is directly concerned with co-operative theory and practice. The many causes of rising prices are discussed, among them being currency, increased consumption and wages, supply and demand, combines, and others. The question of the ability of co-operation to provide an effectual remedy is considered from the standpoint of a candid friend. Mr. Gray knows well the potentiality of the movement if wisely used, but he is also equally well acquainted with the hindrances besetting the path of progress, and thus justifies trenchant criticism. The value of a national co-operative society is strongly advocated in the course of the article.

Mr. Porritt in his article on "The Handling and Transportation of the Canadian Grain Crop" provides a mass of interesting information, chiefly relating to the history of grain elevators. The subject does not at first sight seem to promise much attraction to the average reader, but the narration of the efforts of the growers to avoid exploitation in the various provinces, and the impression made by the gigantic figures relating to the grain production, do certainly impart elements of real and vital import.

The final article, written by Mr. J. J. Dunne on "What Co-operative Dairying has done for Denmark," affords striking evidence of the value of the united action, backed up by scientific methods, which has placed Denmark foremost among butter-producing countries.

We trust that this volume of the *Annual* will be found worthy to rank with its predecessors.

THE COMMITTEE.

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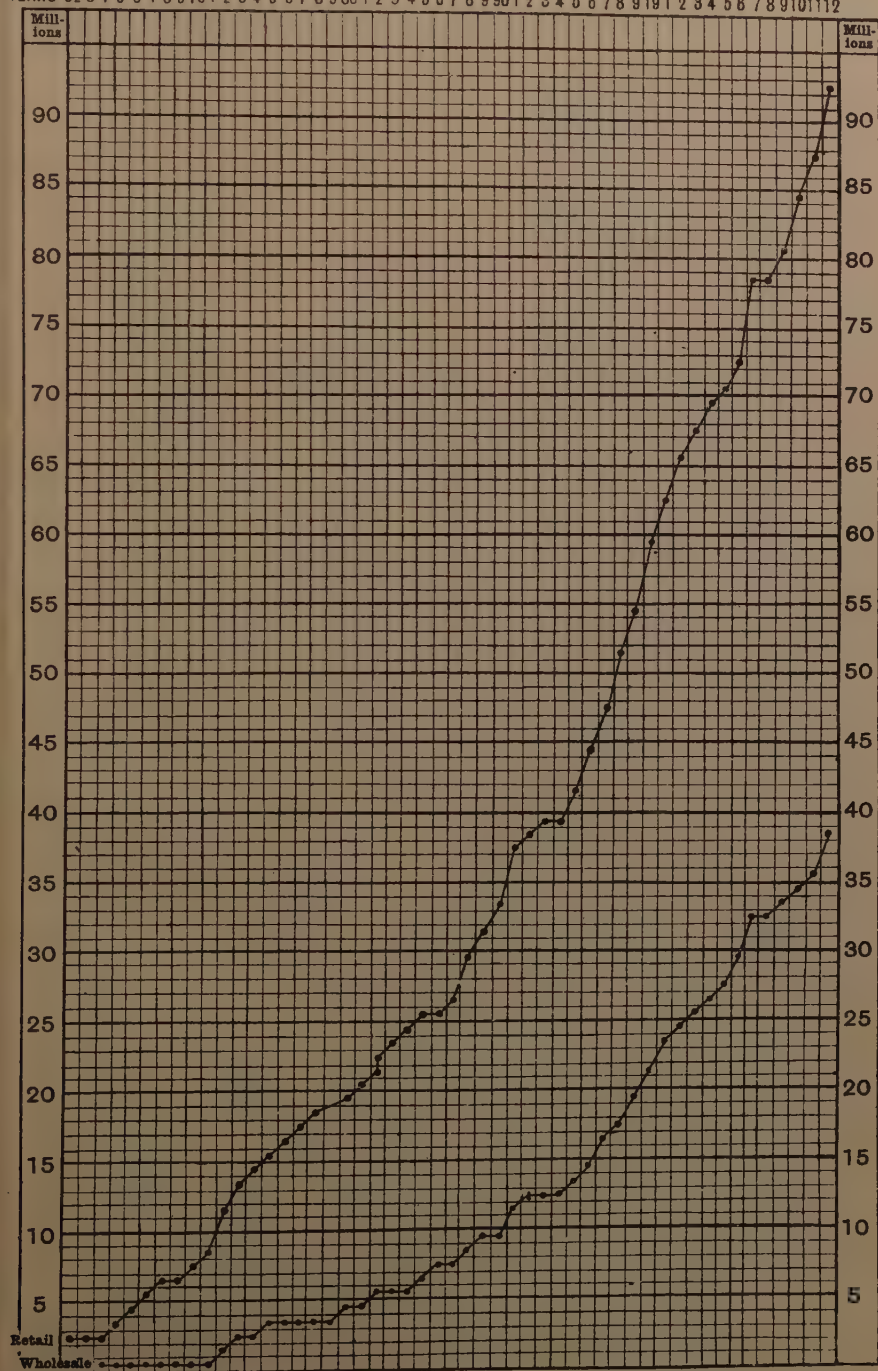
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Comparative Progress of Wholesale and Retail Co-operative Societies in the United Kingdom.

YEARS 62 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 90 1 2 3 4 5 6 7 8 9 19 1 2 3 4 5 6 7 8 9 10 11 12



FIFTY-ONE YEARS' PROGRESS OF CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM.

YEARS.	SALES. £	YEARS.	SALES. £
1862	2,333,523	1888	37,793,903
1863	2,673,778	1889	40,674,673
1864	2,836,606	1890	43,731,669
1865	3,373,847	1891	49,024,171
1866	4,462,676	1892	51,060,854
1867	6,001,153	1893	51,803,836
1868	7,122,360	1894	52,110,800
1869	7,353,363	1895	55,100,249
1870	8,201,685	1896	59,951,635
1871	9,463,771	1897	64,956,049
1872	13,012,120	1898	68,523,969
1873	15,639,714	1899	73,533,686
1874	16,374,053	1900	81,020,428
1875	18,499,901	1901	85,872,706
1876	19,921,054	1902	89,772,923
1877	21,390,447	1903	93,384,799
1878	21,402,219	1904	96,263,328
1879	20,382,772	1905	98,002,565
1880	23,248,314	1906	102,408,120
1881	24,945,063	1907	111,239,503
1882	27,541,212	1908	113,090,337
1883	29,336,028	1909	115,159,630
1884	30,424,101	1910	118,448,910
1885	31,305,910	1911	123,526,351
1886	32,730,745	1912	130,499,145
1887	34,483,771		

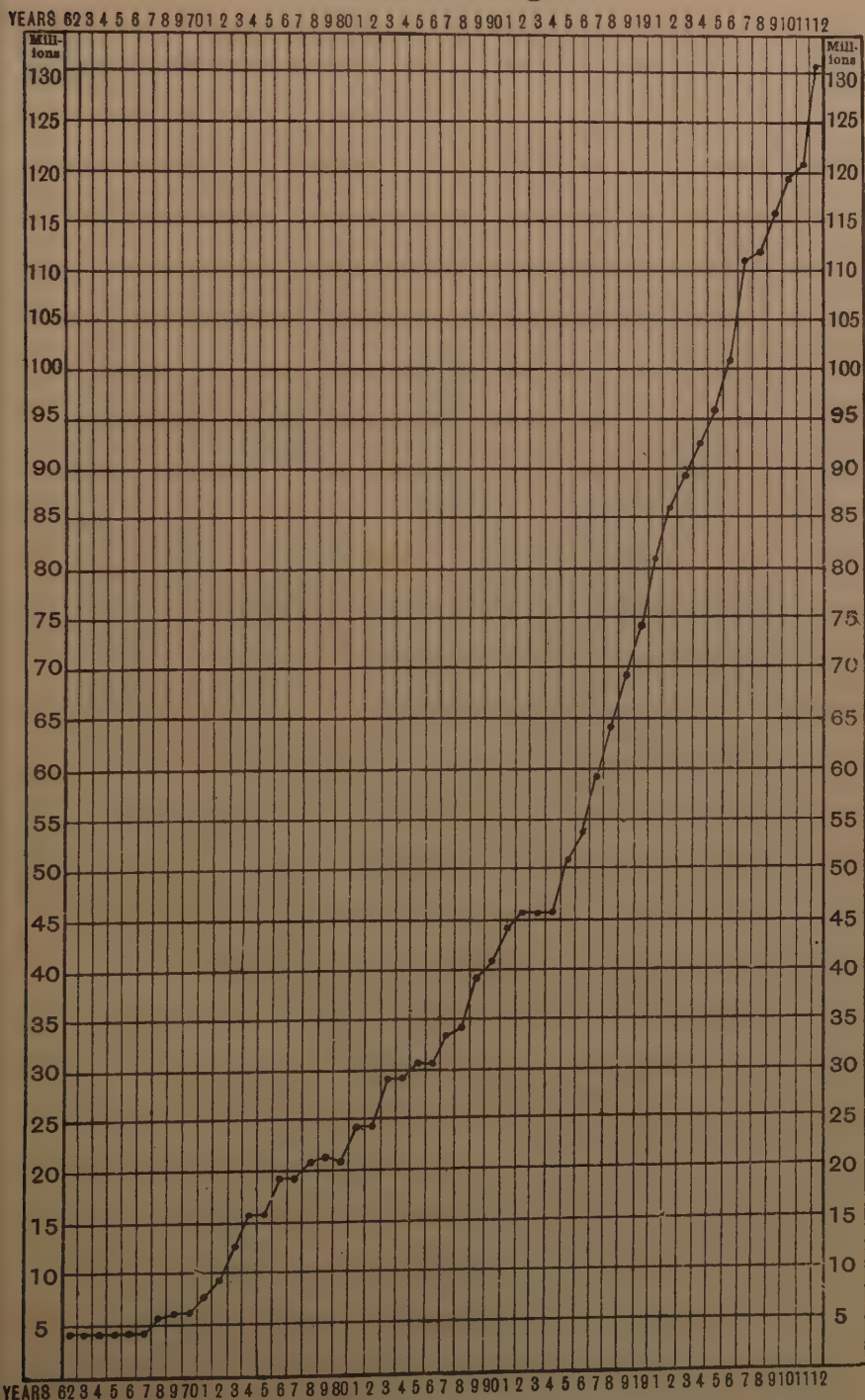
TOTAL SALES IN THE FIFTY-ONE YEARS, 1862 TO 1912	£2,441,414,425
TOTAL PROFITS IN THE FIFTY-ONE YEARS, 1862 TO 1912.....	£234,617,537

STATISTICAL POSITION OF CO-OPERATIVE SOCIETIES IN THE UNITED KINGDOM, DECEMBER 31st, 1912.

*Compiled from the Returns made by Societies to the Registrar and
Co-operative Union.*

Number of Members	3,167,682	£
Share Capital	40,822,192	
Loan Capital	23,657,247	
Sales for 1912... ..	130,499,145	
Net Profits for 1912	13,372,501	
Devoted to Education, 1912	98,169	

Fifty-one Years' Progress of Co-operative Societies in the United Kingdom.



FIFTY YEARS' PROGRESS OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

YEARS.	SALES.	YEARS.	SALES.
1864 (⁸⁰ Weeks)	£51,857	1889 (⁵³ Weeks)	£7,028,944
1865	120,754	1890	7,429,073
1866	175,489	1891	8,766,430
1867 (⁶⁵ Weeks)	331,744	1892	9,300,904
1868	412,240	1893	9,526,167
1869	507,217	1894	9,443,938
1870 (⁵⁸ Weeks)	677,734	1895 (⁵⁸ Weeks)	10,141,917
1871	758,764	1896	11,115,056
1872	1,153,132	1897	11,920,143
1873	1,636,950	1898	12,574,748
1874	1,964,829	1899	14,212,375
1875	2,247,395	1900	16,043,889
1876 (⁵³ Weeks)	2,697,366	1901 (⁵³ Weeks)	17,642,082
1877	2,827,052	1902	18,397,559
1878	2,705,625	1903	19,333,142
1879 (⁵⁰ Weeks)	2,645,331	1904	19,809,196
1880	3,339,681	1905	20,785,469
1881	3,574,095	1906	22,510,035
1882	4,038,238	1907 (⁵³ Weeks)	24,786,568
1883	4,546,889	1908	24,902,842
1884 (⁵⁸ Weeks)	4,675,371	1909	25,675,938
1885	4,793,151	1910	26,567,833
1886	5,223,179	1911	27,892,990
1887	5,713,235	1912 (⁵³ Weeks)	29,732,154
1888	6,200,074	1913	31,371,976

TOTAL SALES IN THE FIFTY YEARS, 1864 TO 1913.....	£499,928,760
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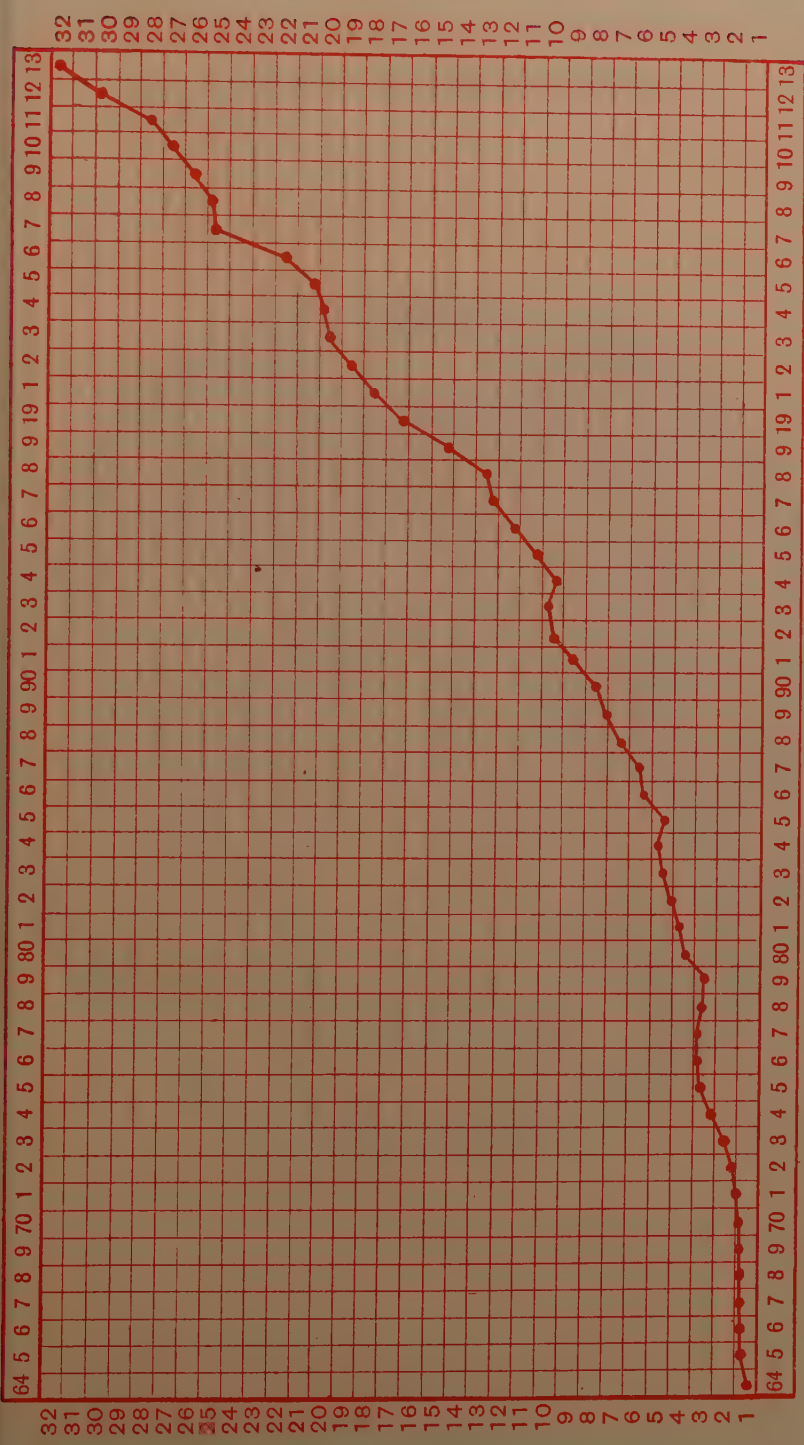
TOTAL PROFITS IN THE FIFTY YEARS, 1864 TO 1913.....	£8,455,202
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STATISTICAL POSITION OF THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED,

DECEMBER 27TH, 1913.

Number of Societies holding Shares	1,168	
Number of Members belonging to Shareholders	2,272,496	£
Share Capital (Paid up)	2,039,054	
Loans and Deposits	5,082,790	
Reserve Fund—Trade and Bank	811,816	
Insurance Fund... ..	877,479	
Sales for the Year 1913	31,371,976	
Net Profits for Year 1913... ..	636,119	

MILLIONS



Fifty Years' Progress of the Co-operative Wholesale Society Limited,
from 1864 to 1913.

MILLIONS

Map of the World, showing



• JOINT WITH SCOTTISH WHOLESALE SOCIETY

Foreign and Colonial Depots.



• JOINT WITH SCOTTISH WHOLESALE SOCIETY
• CO-OPERATIVE WHOLESALE SOCIETY

Map of the United Kingdom, showing
Depots, &c., of the Wholesale Societies.



BUSINESS PREMISES,
&c.,

OWNED BY

THE CO-OPERATIVE WHOLESALE
SOCIETY LIMITED.

Central Premises.



Original Balloon Street Premises.

IN 1869 the Co-operative Wholesale Society built the premises shown in the illustration heading this page, in which to carry on its fast-growing business. For six years after 1863, when the Society's career began, its work was performed in rented buildings, but when the trade reached nearly £300,000 per annum the Committee felt emboldened to the extent of building the Balloon Street property. At that time the only other C.W.S. buildings existing were small depôts for the purchasing of butter at Tipperary and Kilmallock, in Ireland.

In fifty years the business has made rapid strides; almost every year has seen extensions, developments, or new enterprises launched, and now all the premises portrayed on the following pages are the property of the C.W.S.

In the second illustration Balloon Street runs up between the two main blocks, and the original building is that at the top of the street on the right-hand side surmounted by a glass dome. Up to the year 1885 this warehouse towered above an environment of slum property. At the rear was "Clock Alley," a court lined with old cottages, and leading to Corporation Street; little public-houses and coal yards, a cotton-waste warehouse and miscellaneous small buildings were adjacent. All these have been supplanted by the buildings of the C.W.S. In the right-hand block the Bank



Manchester: Bird's-eye View of Central Premises.



Manchester: Mitchell Memorial Hall, Boardroom, Offices, &c., Corporation Street.

CENTRAL PREMISES—*continued.*

occupies a considerable portion of the ground floor; above this the grocery saleroom and buyers' offices are situated, and the remainder of the premises house part of the Furnishing and the Stationery Departments. The furnishing showrooms exhibit samples of practically every article that can be included under that denomination, from suites for the drawing-room to flat-irons, literally too numerous to mention. Societies in the vicinity of Manchester are able to send prospective customers to inspect the stocks, thus enabling the members of a small village Store to gain the same advantages as are enjoyed by city folk. Carpets, rugs, plate, and jewellery are all to be found here. The Stationery Department supplies Societies with wrapping paper, twine, and paper bags, besides all kinds of fancy stationery. Recreation is also dealt in, for this department will provide concerts, or organise excursions for holiday makers.

The buildings on the left of Balloon Street are shown on a larger scale in the illustration opposite. Here, again, several mean and insanitary courts and alleys have been demolished to give place to a fine pile facing Corporation Street. At the top is the Mitchell Memorial Hall, named after Mr. J. T. W. Mitchell, who died in 1895, having been Chairman of the C.W.S. for twenty-one years. The Hall is 107ft. long, 67ft. wide, and 33ft. in height; it will seat 1,200 persons. The first Quarterly Meeting held here was in September, 1907. The floors below the Hall are occupied by the Board and Committee Rooms, the Secretary's and General Offices, and the basement provides a commodious Dining-hall, rendered bright and attractive by dint of many mirrors and white enamel paint.

The Architect's Department is located in this building. A large and efficient staff is constantly occupied with work for the C.W.S. and retail Societies.

Nearly 2,500 employes are engaged in earning their daily bread at the Central premises.

Balloon Street and Garden Street.

ON either side of this building will be noticed the words "Co-operative Wholesale Society;" these mark the limits of the warehouse acquired in 1869. The Grocery Department is in possession of the major portion of this block. Here are held stocks of all goods coming under the head of grocery, in variety too great to enumerate. An extensive trade is done in packed goods, and a small regiment of damsels is kept busily occupied in filling packets of convenient size with rice, tapioca, canary-seed, linseed, oatmeal, and self-raising flour; 150 tons of this latter commodity is the average weekly output. This department will in the course of three or four months be removed to the new Packing Warehouse at Trafford Park.

Situated on the upper floors and basement of the building fronting Balloon Street is the Boot and Shoe Department. Here one may find 220,000 pairs of footgear for men, women, boys, girls, and infants in immense variety of patterns, drawn from the factories at Leicester, Heckmondwike, Enderby, Rushden, and Leeds.



Manchester : Balloon Street and Garden Street.



Manchester: Drapery Warehouses, Balloon Street.

Drapery Warehouses, Balloon Street.

THESE warehouses are at the corner of Balloon Street and Federation Street, a thoroughfare created by the C.W.S., and a name conferred upon it that has a deep significance to all co-operators.

With the completion of the new warehouse on the right-hand side of Federation Street, the C.W.S. occupies the whole of Balloon Street with buildings erected under its own direction. The general effect of the smart modern buildings is naturally much enhanced by the widening of the street, in itself a great improvement to a busy thoroughfare.

The new premises will add 83,000 square feet of accommodation for the drapery departments, and be devoted to fancy drapery, the warehouse opposite being also for drapery, but the heavier descriptions will be dealt with here.

From the topmost floors to the basements they are stocked with a huge variety of goods, including everything that should find a place in a well-equipped Drapery Store.

The vagaries of fashion are kept closely in view by the buyers in the various departments, and hard indeed to satisfy would be the customer whose requirements the C.W.S. failed to meet. This remark applies not only to the bewildering variety of materials drawn from world-wide sources, but also with equal force to the productions made in the C.W.S. Factories. There is also the added satisfaction in this respect that the C.W.S. goods are made under known conditions of healthy surroundings.

Drapery, &c., Departments, Dantzic Street.



Original Dantzic Street Premises.

THE C.W.S. entered into the drapery trade in 1873, and with such success that a warehouse in Dantzic Street was secured in 1875. At this time the business in drapery and woollen cloth amounted to £114,000 annually. Additions were constantly made to adapt the premises to the growing demands until the building reached its present dimensions. It was not long, however, before the cry was again raised for more room, and the fine drapery warehouse in Balloon Street was erected and opened in 1904.

The premises are occupied by the Woollens, Ready-mades, and Shirts Departments. The ready-mades are all from the C.W.S. Factories at Broughton or Leeds, and the cloth from various sources, amongst others the C.W.S. Batley Mill and the Scottish C.W.S. Ettrick Mills. From this department the male co-operator can be completely supplied with all the articles demanded by necessity or custom.



Manchester: Dantzic Street.—Woollens, Ready-mades, Mantles, Millinery, Carpets, &c.



Manchester: Trafford Bacon Factory and Wharf.

Bacon Factory, Trafford Wharf.

BACON rolling and smoking was carried on in the Balloon Street warehouse for many years until the exigencies of space made it necessary to find better accommodation. With this end in view, a plot of land was secured on the banks of the Ship Canal, adjacent to the Sun Mill, and here a factory was built, which has now been in use about nine years.

The Trafford Wharf Factory is not a curing house. So far as the C.W.S. is concerned, curing is done at the C.W.S. Factories in Tralee (Ireland) and Herning (Denmark). At Tralee every week about 1,000 pigs are killed and twice as many sides of bacon cured. These are despatched to the C.W.S. at Trafford Wharf, London, Bristol, Cardiff, and Newcastle. To meet the demand for smoked bacon there are eighteen stoves of the latest and best pattern.

There are about 70 employ  s engaged mainly in the making of rolls, and the weight of bacon and hams dealt with weekly varies from 120 tons to 140 tons.

THE TRANSPORT WAREHOUSE AND WHARF

has a frontage to the canal of 460 feet, the buildings occupying 360ft. by 60ft. The premises and site were acquired in July, 1903, and the warehouse is now well equipped for receiving, storing, and despatching the various commodities. Five electric cranes lift the goods from the hold of ship or barge to the warehouse, and deposit them in railway wagons on the quayside or transfer them to luries. The permanent staff of 23 is augmented by casual labour at busy times, as in the dried fruit season, until as many as 200 workers may be employed, and these deal with an average of 15,000 tons of merchandise yearly. The C.W.S. is, we believe, the only firm which possesses its own accommodation at the Manchester Docks.

THE ENGINEERING WORKS

is another section of the Trafford Park group. It was originally a repair shop, but now deals mostly with new work, and modern tools have been installed for undertaking general engineering, electrical work, and millwrighting in all its branches. The Engineers' Department at Balloon Street act as consulting, mechanical, electrical, and heating and ventilating engineers for complete installations, reports being made on existing work, and plans and specifications prepared for repairs or new work.

Grocery Packing Warehouse, Trafford Park.

THIS building occupies a site fronting Trafford Park Road, and lying between Sun Mill and the Bacon Warehouse. It has railway accommodation directly connected with the Ship Canal and Trafford Park Railways. The building is six storeys in height, each floor being 217ft. 6in. long by 54ft. 6in. wide. Being a detached building, it has the advantage of being well lighted by windows all round. There are two fireproof staircases, one at each end of the building, which give ample protection to the employés in case of fire, and two electric cage hoists and one sack hoist. Each department is provided with suitable accommodation for washing, &c., and in addition there are men's and women's dining-rooms.

It is expected that these premises will be ready for occupation about March or April, when the work will be removed from Balloon Street. Among the many advantages conferred by the new building will be the direct transition by conveyor from the Sun Mill of the flour used in making the popular "Federation" self-raising flour, 150 tons being the average weekly output. The improved facilities will enable us to deal not only more expeditiously with goods, but also with greatly increased trade, which we are confidently anticipating.



Manchester: Grocery Packing Warehouse, Trafford Park.



Manchester: Broughton Building, Traffic Departments, &c.

Broughton Building, Traffic Departments, &c.

THE Building Department sprang from the remains of the Union Land and Building Society, which failed in 1880. The C.W.S., being large mortgagees, took over some of the assets, among which were building materials, and a department was formed at Balloon Street, which was chiefly confined to repair work. The first building of any magnitude erected by the department was the extension of the original Balloon Street premises. Since then its achievements have been numerous, the chief of which was the erection of the imposing Central Offices, &c., shown in the bird's-eye view on another page. The department was removed to Broughton in January, 1913, and now, in addition to C.W.S. work, it contracts in the open market for the work of retail Societies. All equipments are to be found at Broughton for the making of shop fronts and fittings, and many Societies' new premises bear testimony to the artistic and substantial quality of the work. All the branches of the trade are represented—draughtsmen, clerks, joiners, plumbers, masons, &c.—and, with the perfect organisation and centralisation of the work, many economies both in time and cost are effected.

The traffic department is an essential adjunct to an institution of the magnitude of the C.W.S. Here, again, beginnings were very humble, but naturally the department has grown with the trade, and has also kept abreast with the times, for in addition to the numerous horses, drays, &c., a large fleet of motor luries are housed at Broughton, but as yet the Society has not engaged in air traction. The department specialises in quick transit of perishable goods and direct conveyance of fragile goods to save handling in transit.

The description of the Broughton Factories would be incomplete without mention of the spacious dining-room. Here accommodation is found for 800 employés, and meals can be obtained at a tariff which is suited to the pockets of the workers. During the winter months social functions are frequently held to promote good fellowship among the employés.

E. & S. C.W.S. Joint Insurance Dept.

(late C.I.S.),

Corporation Street, Manchester.

THE history of the Co-operative Insurance Society is a record of honourable and useful work for co-operation. The Society was registered in 1867, under the Companies Act, and both Societies and individuals were admitted to membership. In 1872 business first was done through paid agents; and in 1875 the policy of re-insuring risks first was adopted. In 1899, following the Industrial and Provident Societies Act of 1893, the company was converted into a Co-operative Society, and all forms of insurance were undertaken, while branches subsequently were opened in Scotland and in England north and south. The year 1904 witnessed the materialising of the happy idea of collective insurance. From 1905 a movement for the unification of co-operative insurance had been afoot, and, after several years of discussion at conferences and meetings, the business was transferred to the joint control of the two Wholesale Societies.

For the first four years the office was at the Rochdale Pioneers' store, but 1871 saw its removal to Manchester. Various premises were occupied and deserted as the demands of business grew, until the final move into its present home took place in 1908.



Manchester : E. & S. C. W. S. Joint Insurance Department, Corporation Street.



Newcastle: West Blandford Street.

Newcastle Branch.



Newcastle Branch, Waterloo Street, in 1876.

THE Newcastle-upon-Tyne Branch was established in 1871, or exactly eight years after the inception of the C.W.S. at Manchester. Business was commenced in a small four-roomed warehouse, but, with a rapidity characteristic of the institution, the trade outgrew the accommodation, and it was thereupon decided to build the Waterloo Street warehouse, the occupation of which was entered into in 1876. That, too, only sufficed for a time, and eventually it became necessary to erect the larger warehouse in West Blandford Street.

WEST BLANDFORD STREET.

The West Blandford Street buildings are devoted to the Grocery, Provision, Boot and Shoe, Woollens and Ready-mades, Manchester and Greys, Dress, and Paper and Stationery Departments, as well as the General Offices, Boardrooms, Meeting Hall, and Dining-room.

Newcastle Branch—*continued.*

In the centre of the main buildings is a spacious covered-in yard, where the receiving and despatching of all goods is conducted. Further up the street will be found the Motor Garage and Stables, and also a building where the Saddlery and Leather Bag-making Departments are located.

WATERLOO AND THORNTON STREETS.

As the name in the illustration implies, the building on the left, which stands in Thornton Street, is occupied by the Furnishing and Carpets Department, whilst the other—the Waterloo Street building—accommodates the Millinery and Fancy Drapery, and Jewellery and Fancy Hardware Departments.



Newcastle: Waterloo Street and Thornton Street.



Newcastle: Quayside.

Newcastle-upon-Tyne Quayside Warehouse.

THE erection of this building was commenced in 1900 and completed in 1902. It originally consisted of eight floors, but in 1909 an extension became necessary, and the roof, which had hitherto been flat, was covered in. The building is 90ft. wide by 120ft. long, and the height from floor to ceiling on each floor is a little over 11ft. It is capable of warehousing between 7,000 and 8,000 tons. Being conveniently situated to the river and in close proximity to that part of the quay where the London, Continental, and other regular lines of steamers discharge their cargoes, it has proved to be a great boon to the departments it serves. One of the floors is used as a bonded store for the warehousing of dutiable goods, and it is, of course, only open during regulation hours. There are loading and discharging platforms fronting the quayside, and also at the back, which opens out into Sandgate. All goods on account of the Grocery, Butter, and No. 1 Grain Departments are dealt with by the staff there, and machinery has been installed for cleaning fruit, grain, &c.

Green Fruit and Potato Department, Stowell Street.

THESE premises are situated in close proximity to the Newcastle fruit and vegetable markets. The building was completed in the year 1909, and comprises basement, ground, No. 1, and No. 2 floors. In the basement is the banana-room, specially constructed for the ripening of Canary and Jamaica bananas. On the ground floor the work of receiving and despatching is transacted, and special facilities are provided in the way of two large dockways, enabling four vehicles to be attended to at the same time. On the first floor are situated the manager's, assistants', and general offices, whilst a portion of the flat is also utilised as the saleroom. The second floor is principally used for storing goods of a keeping quality, such as nuts, figs, &c.



Newcastle : Stowell Street.



Newcastle: Bird's-eye View of Pelaw Works.

Pelaw : Bird's-eye View.

THE policy of the C.W.S.—and, indeed, of the co-operative movement throughout—is to produce for the consumer the necessaries of life at the least possible cost consistent with the best possible conditions for the workers.

It is a noticeable fact that the productive works of the Wholesale were nearly all centred in and around Manchester, until, in pursuit of the policy above referred to, it was found that the goods there produced could not be supplied to the consumers in the Newcastle district at the least possible cost, consequent upon the enormous carriage they had to bear. As a remedy the Newcastle Branch Committee considered that their duty lay in the direction of establishing productive works in their own district, so they at once set about to find a suitable place wherein to commence operations. In their endeavours to do this they had in view the heavy rates, taxes, &c., the factories would be called upon to pay if they were established in Newcastle, and it was for this reason partly that Pelaw was chosen as the venue of productive effort by the Newcastle Branch. Another reason which animated them in their selection of Pelaw as the ground on which their victories should be won was that the land could be procured at a very small cost; and, again, the sites available were adjacent to the railway, thus saving the heavy charges for cartage to and from the station.

Illustrations of the separate works follow in due order, which comprise Drug and Drysaltery Department, Printing Works, Cabinet Factory, Clothing Factory, and Engineering Works.

There is also a commodious dining-room, which is found to be a great convenience, as the greater number of the employés come from considerable distances.

Drug and Drysaltery Works, Pelaw.

THIS factory began in 1896 as the packing department of the C.W.S. with seven employés. The following impression, from the "Wheatsheaf," conveys some idea of its scope to-day:—

Many visits would not exhaust the interest of these works. Standing on its galleries, overlooking the ordered industry below, one has curiously the impression that comes when exploring the decks or on the bridge of a ship, particularly an ocean liner. Perhaps the bridge-like galleries start the fancy. Then there is the same cleanliness, the same compactness and economy of arrangement, and sufficiency of space for everything, yet no waste of an article so valuable. It is the same sense of completeness which makes a boat at once the simplest and most perfect example of man's skill in adapting means to ends.

The scheme of the building is a great glass-roofed hall with a wide, encircling gallery, which is divided into rooms where all the mixing is done. You pass in rapid tour the various ingredients being blended for such diverse things as Boot Polish, Metal Polish, Emulsion of Cod Liver Oil, Cake Flours, Bronchial Mixture, the various household remedies—but the list is endless. In galleries forming a St. George's cross above the main area other goods are stored in bulk, for at Pelaw grocery sundries are packed for the Newcastle district. Here are also tins and bottles stocked by the million. And almost automatically this incongruous host descends by its own weight to the army of packers below. Patent bottling and weighing machines without number expedite the work. We have called the packers an army: rather they are drill sergeants beneath whose marshalling fingers files of bottles, packages, and tins—tall, squat, thin, broad-chested, in uniforms infinite in variety—form themselves into companies and battalions. And the wonder of it all is like that of a marvellously intricate piece of mechanism.

Efficiency may be inhuman, however. Are all the hundreds of workers, one asks, merely cogs in the machine? Pelaw visited dispels such an idea. When the "Wheatsheaf" man arrived, the manager of the works was engaged. "If you are inclined, just wander round where you like; then ask any questions you wish in twenty minutes, when I'll be at liberty," he said. Full use was made of the permission, and the simile of machinery gave place to something more human. It was a hive of happy industry. Obviously there was no driving. Subsequent inquiry proved that the Congress minimum wage scale is in force; this means that as much as £3,000 extra per year is paid at Pelaw in wages compared with the rates which rule in many competing factories. Only the continued and increasing loyalty of co-operators can overcome so great a handicap to-day.



Newcastle : Pelaw Drug and Drysaltery Works.



London: Leman Street.

London : Leman Street.

THIS fine block of buildings is the headquarters of the London Branch. The older part of the building, with the clock tower, was erected in 1887, and the new wing for the accommodation of the drapery department was opened for business in 1910. The general office, boardroom, conference-hall, dining-rooms, and kitchen are all in the older building, where also the grocery saleroom and buyers' offices are situated. The basement serves the purpose of a storeroom for provisions—cheese, butter, eggs, lard, &c.—while the upper floors are devoted to the grocery and boot and shoe departments, access being given both to the new wing and to a still older building not shown in the illustration, where the furnishing, ironmongery, carpets, and stationery departments are situated.

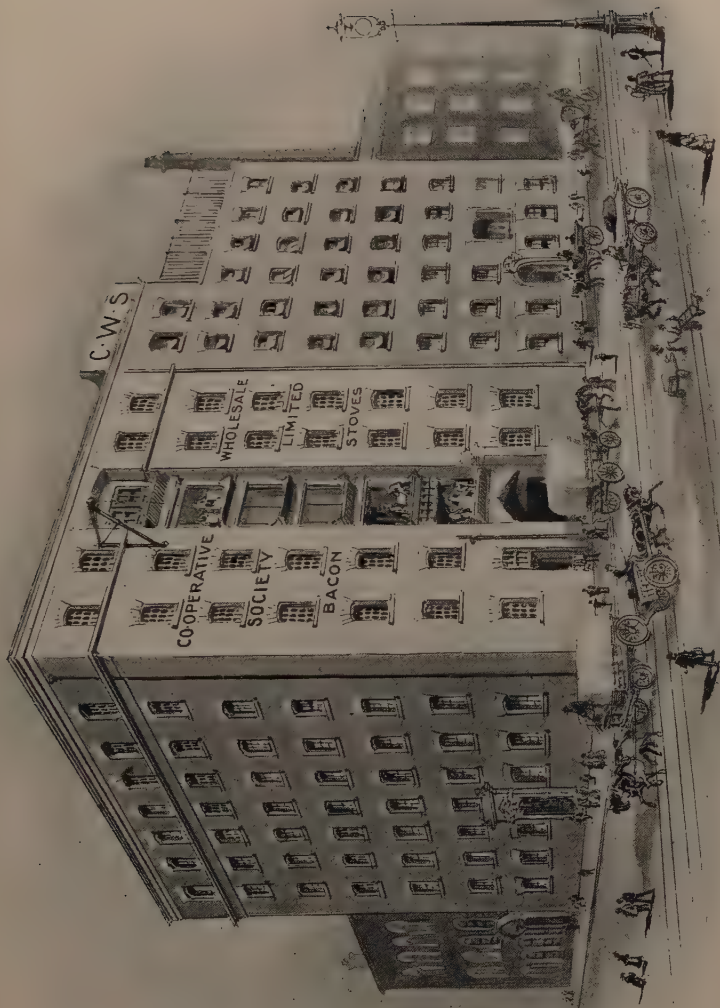
The latest wing is devoted to the heavy and fancy drapery, millinery, and ready-mades departments, the basement being used for a joint packing-room. In the building is a telephonic exchange, which connects all the departments in London, Northampton, Bristol, Cardiff, Manchester, Newcastle, and the productive works in various parts of the country.

The building, which is 333 feet in length, is of fireproof construction, the floors being built of steel and concrete, an automatic fire-extinguishing apparatus being installed throughout. Besides three stone staircases for business purposes, iron stairways provide extra exit in case of fire. There are two electric passenger lifts, besides numerous lifts for the conveyance of goods. Electric light is provided throughout, and the building is warmed by low-pressure hot-water pipes. An efficiently-drilled fire brigade composed of members of the staff affords additional security against fire.

London: Bacon Stoves, &c.

CONSIGNMENTS of green bacon are here received from various pig slaughtering centres. The English, Irish, and Danish meat arrives packed in bales, the Canadian in boxes, the C.W.S. supplies to Societies being sent out in crates. A large proportion of the meat comes from the C.W.S. bacon factory at Herning, Denmark; while supplies are also received from the C.W.S. bacon factory at Tralee, Ireland. The green bacon is put into the stoves, of which there are nine, with a capacity of 2,034 sides. The smoking process takes three days, so that there is a nominal capacity of over 4,000 sides per week.

Above the bacon stoves is a storeroom for C.W.S. brushes from the Leeds factory; and in connection with the London Branch Furnishing Department are workrooms for French polishing, upholstering, and the manufacture of bedding. The leather and grindery department occupies a portion of the building. Here are kept large stocks of butts and bends of leather in the various tannages suitable for repairing, besides numerous requisites for the boot trade, such as nails, rivets, rubber heels, laces, socks, and leggings.



London : Bacon Stoves, &c.



London : Farclough Street.

London : Fairclough Street.

THESE premises occupy a site bounded by Fairclough Street, Backchurch Lane, and Boyd Street, which has an area of about 4,416 square yards.

The clearing of this large area has been the means of demolishing a large quantity of low-class property, and as a consequence improving the sanitary condition of the district.

The buildings occupying the site consist of an Empties Department, Joinery Department, stables for forty-four horses, with loft over, and men's mess-room, Engineers' and Electricians' Department, building material storage, laundry and boiler-house, and garage, with office and covered yards.

Silvertown Mill and Factories.

THIS bird's-eye view is inserted for the purpose of showing the relative positions of the Flour Mill, Productive Factory, Soap Works, also Employés' Dining-rooms. Other plates, which will be found in their places, give the separate buildings with a brief account of the particular work carried on.



Bird's-eye View of Silvertown Factories.



Silvertown (London) Productive Factory.

Productive Factory, Silvertown.

EXTERNALLY the factory has little attraction. It is just a huge square building which impresses by bulk alone. First it arrests by its size, and then makes its spaciousness seem small by comparison with the multitude of articles it manufactures. It is a Confectionery Works, and Boiled Sugars, Fondants, and Clear Gums are made in forms, colours, and flavours innumerable. Should anyone desire to know into how many forms sugar can be transmuted in boiled sweets alone, Silvertown can offer a different kind for every day this year and still have a choice variety to select from on high days and holidays.

Spice, and particularly Pepper, grinding forms another important part of the work. The milling of Mustard is a new development which already is so successful that the plant is now being doubled. Other products range from Self-Raising Flour to Piccalilli, from Cremona Oats to Beef Extract, from Table Jellies to Table Salt. Such is the scope of the factory established only in 1904.

"The work of Silvertown is so varied, and its products are so dissimilar," said a writer in the "Wheatsheaf" recently, "that to convey a total impression by one word is not easy. If it could be done I think the word would be 'specialisation.' Despite all diversity this is the abiding idea which the factory leaves in the mind. You get it in the sweet department; there may be men who know more than its foreman about boiling sugar, but you would hesitate to say so. There seems nothing about jellies, again, that their maker does not know. You are abashed in the laboratory and amazed in the statistical department. Then the total effect comes when you stand watching the wooden cases being trundled over the loading way. Only that morning some of these orders now despatching had been received. But each department had been organised to *anticipate* them. Their execution seems as automatic as the flow of water when a bath tap is turned. It is specialisation for service, for the service of co-operators. They are availing themselves of it increasingly, and Silvertown to-day promises to be too small to-morrow."

Bristol Depot.

THE architectural style of this building is a free treatment of English Renaissance. Due attention has been given to the provision of light and air at every portion of the premises, including the basement. It is situated in the most central part of the city, the Floating Harbour forming the boundary on one side, thus bringing water communication direct to the building. An area of about 2,231 square yards is occupied, consisting of basement and six floors.

The total height of the building from the street to the ridge of the roof is 86 feet; to clock tower top, 130 feet. The present floor space is about 100,000 square feet, ultimately to be increased to 150,000 square feet.

The building has a commanding entrance from the Quay, surmounted by sculptural figures, illustrating two of the local industries—mining and agriculture—and is fitted with an electrically-driven passenger lift running through the well-hole, which gives rapid means of access to every floor. Similar hoists communicate direct with all the departments, *i.e.*, grocery, drapery, boots, furnishing, ready-mades and woollen cloth, and grocery sundry packing.

The internal structure is fire resisting, the columns being of iron and the floor of steel girders, filled in with cement concrete and covered with pine flooring.

The power and light is electrical. Heat is by low-pressure hot water apparatus, radiators being fixed in the various rooms.

Every precaution has been taken against fire, the building being fitted throughout with an installation of automatic fire sprinklers of the "Grinnell" pattern.

A complete system of telephones is installed for communication between all departments.



Bristol Depot: Broad Quay.



Cardiff Depot : Bute Terrace.

Cardiff Depot.

THE building, which faces Bute Terrace and Mary Ann Street, was erected by the Building Department, London Branch, from the designs of our architect at Balloon Street. It consists of basement, ground, first, second, third, and fourth floors. The basement floor is 7ft. below pavement level, and up to the ground floor is 12ft. high, the walls being built with ivory-white glazed bricks. The ground floor is about 110ft. by 44ft. and 12ft. high. The walls of this and the other floors are matchboarded all round. On the first floor are the saleroom, general offices, manager's office, and the usual lavatory accommodation. Part of the third floor is used for departmental showrooms, and the fourth floor is occupied by the Drapery Department. The main staircase, which runs from the basement to the top floor, is surmounted by a tower about 14ft. high, and flagstaff. The building is fitted up with electric light, the supply being taken from the Corporation mains. The heating arrangements are carried out by hot-water pipes and radiators situated at convenient points.

New Depot, Cardiff.

THE C.W.S. having acquired the site of the old Town Hall, Police and Fire Brigade Station, and old Post Office, is now erecting new premises thereon.

The new buildings will have a frontage of about 170 feet to St. Mary Street, and a depth of about 154 feet to a proposed new street connecting St. Mary Street and Westgate Street. The Westgate Street portion of the site will, for the present, remain unoccupied.

There will be eight floors including basement.

The principal entrance will be in the centre of the elevation to St. Mary Street, and there will be a loading entrance from the proposed new street to a large central covered loading-yard.

Accommodation will be provided for the grocery and provision department on the basement, ground, and first floors—the latter having a large general saleroom for the accommodation of retail Societies' buyers. On the second, third, and fourth floors the drapery, boot and shoe, and furnishing departments will be situated, with joint packing and receiving department on the ground floor adjoining the central loading-yard. On the fifth and sixth floors will be situated an Assembly Hall (73ft. long by 53ft. wide), with dining-room in conjunction therewith and subsidiary rooms for various purposes.

Access to all floors will be from an imposing central stone staircase, provided with high-speed passenger hoist in the well, and in addition there will be a secondary stone staircase as an alternative means of exit. For warehouse purposes there will be three electric goods hoists running in fireproof hoist-wells, so that the safety and convenience of all visitors to the building will be amply assured.

Architecturally the building will have an imposing elevation to St. Mary Street, of a free classical type, the central feature being surmounted by a clock tower.

The elevations are intended to be formed in ashlar stonework.



New Depot, Cardiff.



Northampton Saleroom : 41, Guildhall Road.

Northampton Depot.

THE front part of the larger building was built in 1897 by the C.W.S.'s own Building Department, and afterwards extended to meet the increased trade. It is used for the distribution of groceries to the small Societies in the district. (Previously two small rooms were occupied, which were opened in October, 1890, for use as a saleroom only.) There is also a large General Office, some of the clerks being engaged wholly in audit work in the supervision of Societies' accounts.

The smaller building is used as a bacon warehouse, containing smoke stoves. There is a large trade done in Danish sides (smoked and plain), cured in our own slaughteries, and smoked on the premises; also a considerable quantity of American bacon is sold, consisting of Cumberland cuts, bellies, hams, also smoked and plain rolls. The rolling is done on the premises, and the bacon is brought principally direct through our New York house.

The Depôt is situated about 100 yards from the Town Hall, and the same distance from the Midland Railway Station, and stands midway between the two points.

The district covered by the Depôt is Northamptonshire and Huntingdonshire; also part of Warwickshire, Bedfordshire, Buckinghamshire, Oxfordshire, and Cambridgeshire.

Nottingham Saleroom.

THIS Saleroom is situated in Friar Lane, a thoroughfare leading from the Market Place to the Castle. It will be obvious to the reader from the first glance at the illustration that this ecclesiastical-looking building was not originally intended for a saleroom. Still, its interior provides the C.W.S. with an ideal sale and sample room.

The building was previously a Congregational Chapel, supported mainly by well-to-do people, but these gradually migrated to the suburbs, leaving the services only meagrely attended.

The building was offered for sale and was purchased by the C.W.S. in 1899. The change necessitated many internal alterations; the organ, pulpit, pews, &c., were all removed.

On entering, there is a clear floor space of 48ft. by 42ft. The ground floor is occupied by the Grocery and Grocery Productive Departments, and a representative display of samples is tastefully arranged on counters and tables, while handsome showcases are placed throughout. What was originally the vestry is now the manager's office.

A wide staircase leads to the gallery which completely encircles the room. This is occupied by the Drapery, Woollens, Boots, Furnishing, and Crockery Departments. The millinery and mantles have a special room on the ground floor at the rear of the building.

For the convenience of Societies in and near Nottingham a Furniture Showroom has been opened in Wheelergate, adjacent to the Saleroom, and if the volume of business should justify such action no doubt further developments may be looked for.



Nottingham Saleroom: Friar Lane.



Birmingham Saleroom : 16, Pershore Street.

Birmingham Saleroom and Cycle Depot.

THE handsome block of buildings seen in the illustration was completed in 1910. Previously the premises at Birmingham consisted of only the two-storeyed building seen on the left-hand side of the illustration, and was used solely for saleroom purposes, the ground floor being occupied by the Grocery Saleroom, the room above having to suffice for all other departments. It had long been felt to be an impossibility to make a display in the limited room at the disposal of the drapery and allied departments, so on the decision of the Committee to form a Cycle Dépôt at Birmingham it was decided to take in the two blocks of premises adjacent, which were already in the possession of the C.W.S., and erect a building which would give more saleroom space, and also could be utilised for a Cycle Dépôt. Operations were commenced, and resulted in the building seen on the opposite page. The premises have a fine frontage on Pershore Street, and are well within five minutes' walk from New Street Station. The older portion of the building is now used for Grocery Sale and Sample Room on the ground floor, and the upper floor is the Showroom for the Boots, Furnishing, Hardware, and Crockery Departments. In the new buildings the whole of the first floor is occupied by the drapery and allied departments, and gives plenty of room for a grand display. The Cycle Department occupies the basement and upper room as warehouses, the ground floor being used for offices and showrooms. The Grocery Department and Cycle Dépôt are open for business every day.

Huddersfield Saleroom.

THIS Saleroom was first originated in 1885. Business was commenced in the boardroom of the Industrial Society. A room in Lion Arcade was taken a little later, and samples of grocery were first shown; eventually the boots and shoes and drapery representatives commenced to attend every two months, and another room adjoining was taken. After many years of growing business it was removed to much larger premises in 1898, at 4, Railway Street, where we occupied three floors—the ground floor for office, the first floor for grocery, drapery, and boots; second floor for crockery, mantles, and furnishing. The drapery and boots representatives, owing to increasing trade, now attended weekly, and these premises soon began to show signs of being too small for the business.

In 1904 the Huddersfield Brush Factory was taken over, and in 1906 the business was transferred to the Leeds Brush Factory. The premises were then reconstructed and converted into the present saleroom. These premises were open for business in October, 1907, and consist of three floors and basement.

The basement is utilised for washing hams and storing empties; on the ground floor are the manager's office and warehouse, where a stock of hams, cheese, bacon, potatoes, onions, and green fruit are kept. The grocery saleroom is also on this flat. The first floor is occupied by boots and shoes, ready-mades, furnishing, crockery, and brushes; the second floor, which is a well-lighted room, being lighted from the roof, is used for drapery, mantles, and millinery.

There is a smokeroom; also an electric hoist and electric lights throughout. The trade has increased considerably since occupying these premises.



Huddersfield Salercom: 14, Upperhead Row.



Longton (Staffs.) Crockery Depot.

Longton Crockery Depot.

THE pottery trade first engaged the attention of the Wholesale Society in 1886, when the increasing business in this class of goods gave rise to the suggestion to establish a Depôt in the manufacturing district for the purpose of collecting and distributing the articles suitable for co-operative trade.

The result of thus aggregating the needs of Societies has been very successful, for the business connections and extensive dealing of the C.W.S. with the local manufacturers enables them to supply small orders with much advantage to the retail Society, and large ones on same terms as makers.

At the commencement premises were rented, but growth of trade justified the erection of a building, and in 1889 the new place was occupied. Sufficient land was acquired at the same time to admit of future developments, and from time to time additions have been made.

About 1898 the C.W.S. decided to start a decorating department and build a kiln, so that Societies could have the satisfaction of purchasing an article finished under healthy conditions. Now there are three kilns, and nearly £1,400 per year is paid in wages to this department.

Goods sold from Longton are drawn from sources where the best conditions of labour prevail, and a large quantity are dipped in either low solubility or leadless glaze.

Fellmongering, Fat, and Bones Department, Pontefract.

THE buildings shown on the opposite page are where the C.W.S. conduct their fellmongering business, and also their fat and bone business. In the foreground is the fellmongering department.

Fellmongering is that process by which wool is separated from the sheep skins. There are several ways of doing this, and that employed by us is by applying to the flesh side of the skin a mixture of lime and sulphide of sodium; the skins are allowed to lie two days with this mixture on them; they are then washed, and the wool after the treatment leaves the skin (or pelt, as it is called in the trade) readily. It has to be pulled off by hand, because on every skin there are several qualities of wool, and this has to be carefully sorted by hand as it is pulled off. The wool is then to be dried, and stored for sale in the large building shown on illustration.

The bone department (which is in the background) extracts grease from bones and then grinds the bones into bone meal, which is sold for manure. The grease is extracted by putting the bones, after being roughly broken, into large tanks; the tanks are then sealed, and by means of a pipe benzine is run into these tanks. The benzine is driven off again by means of steam and recovered for future charges; the bones are then ready for grinding.

All these departments are worked in conjunction with the Hide and Skin Department.



Pontefract Fellmongering Works.



Limerick Depot: Mulgrave Street.

Limerick Depot.

THIS Depot was established in 1869 for the purchase of butter. It has a frontage in Mulgrave Street of 20 yards, comprising the offices, which consist of the manager's, general, typists', and shipping office, &c. The total staff at present at the Depot is seven.

The store is divided, one portion being used as a butter store, where all butter is received, graded, coopered, &c. Another part of the store is occupied by the cold storage chambers, the inner chamber being reserved for the C.W.S. Societies. The outer chamber is utilised in a general way in connection with the butter arriving at the Depot during the warm weather, and placed therein before being shipped. The capacity of both chambers is 250 tons. The dimension of store and chambers together is 40 yards by 20 yards.

All butters received are tested from time to time to see that they comply with the standard of moisture, and any not so doing are returned to the makers.

At the rear of the stores is the engine-room, where a 12-horse power gas engine is erected, the gas for same being supplied by our own gas suction plant.

Here is also a refrigerating machine (Halls') in connection with the cold chamber. A dynamo is also erected, and the offices and stores are lighted with our own electric light.

Armagh Depot.

SITUATED in the midst of the finest agricultural district in Ireland, it is also the largest egg distributing centre in the movement. On the premises eighty concrete tanks have been laid down for the purpose of preserving eggs in pickle for the winter requirements of Societies, the accommodation providing for over 4,000,000 eggs.

There are also box-making departments, in which all the packages required for butter and eggs are made.

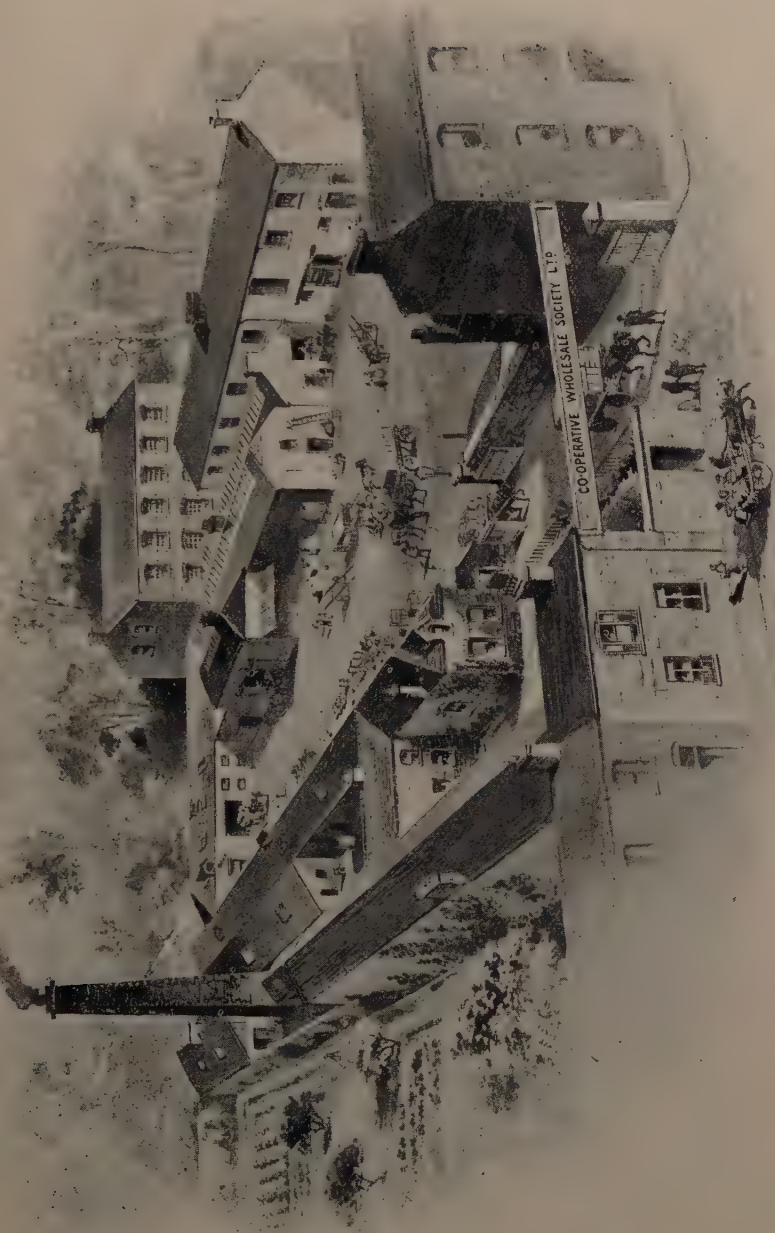
Large quantities of butter are manufactured at the Depôt, which is fitted up with refrigerating plant and cold stores in connection with the extensive butter trade carried on.

The Depôt occupies a unique position for the shipment of fruit, the district being the largest fruit-raising centre in Ireland.

It also supplies Societies with large quantities of poultry for their Christmas requirements.

The operations of the Depôt extend all over the North and West of Ireland, where, in order to secure the large quantity of eggs required in the freshest possible state from the farmers, over twenty collecting stations have been established.

The premises are very extensive, covering an area of 25,000 square feet, of which two-thirds are under cover, and are lighted with electricity throughout.



Armagh Depot: Dobbín Street.



Tralee Egg and Butter Depot : Pembroke Street.

Tralee Egg and Butter Depot.

THE buildings in the foreground of plate comprise offices and boxmaking departments. At the left are the Creamery and Butter Blending Factory. The long building at the rear is occupied by power house, fitter's shop, &c. The building in the centre of the block contains butter cellars and roll room, with timber drying, &c., lofts overhead. The vacant space between these two latter groups is now mainly occupied by new cold stores and suction gas plant recently erected. The larger group of buildings at right of illustration comprises cooperage at rear, store lofts in centre, and egg pickling department. There is also land available for purposes of extension, &c., at the rear of the buildings shown of at least equal area to that already built on. Most of the erections are fairly recent, as the property was purchased in 1896. The original Depôt opened in 1874, now exclusively used for the purchase and packing of eggs, is at the other side of Pembroke Street fronting the premises illustrated, and is not shown in plate. In the background of illustration the position of Tralee Bacon Factory is indicated, and the boundaries of both premises are practically contiguous.

Tralee Bacon Factory.

THIS factory, which is about two minutes' walk from the railway station, is mainly constructed of local sandstone, and in design is practically a one-storeyed building.

It was originally equipped to handle about 500 pigs weekly, but, as this quantity proved totally inadequate to supply the requirements of Societies, who were quick to recognise the excellence of the Wheatsheaf brand of Tralee bacon, lard, and sausages, some slight structural alterations had to be made in the year 1907, and 1,000 pigs weekly can now be dealt with by the various departments.

The pigs, which are mostly procured in the Kerry district, are driven in batches into the sticking-pen. They are there shackled by one of the hind legs, hoisted on to a running bar, and killed. They are next plunged into the scalding tank, and pass on from that to the scuttling table, where most of the hair is removed, the balance disappearing during the short time they are exposed to the extreme heat of the singeing furnace. They next get a cold bath, and are again raised to the running bars, where they are scraped quite clean, disembowelled, weighed, removed to chill-room, and finally to the curing-cellars, where they remain for about twelve days. They next reach the packing department, and are shipped from there in four, five, and six-side bales to suit the requirements of the various districts.

The lard, sausage meat, &c., are all dealt with in their respective departments, and from this, and the short foregoing description of the factory, the careful reader will observe that the "squeal" is the only item which, up to the time of going to press, has not proved of marketable value.



Tralee Bacon Factory : Rock Street.



Esbjerg Butter Depot.

THE land is freehold, and covers a total area of 2,500 square yards. Situated in a twenty years' old garden stands the house occupied by the manager, adjacent to cool butter cellars of about 100 square yards.

In conjunction with these cellars, on the right side of the yard is the principal butter warehouse—two large working-rooms of about 450 square yards, connected with three large storing-rooms of 225 square yards, all fitted with very effective cold air refrigeration plant and facilities for handling the butter properly. Through these cellars about 3,000 casks of Danish butter pass weekly.

Opposite to the cellars stands the office building, containing three light and spacious office-rooms, in which the clerks are employed. On this side is also the motor garage.

With electric power and light all over the establishment, and well paved and otherwise kept in good order, and with flowers and trees espaliered along the railings and the whitewashed walls, the establishment is a model specimen and an attractive advertisement for the C.W.S. in Denmark.

Odense Depot.

THIS Dépôt for butter, eggs, and bacon commenced business on June 26th, 1898. The butter warehouse is built at the harbour on leasehold land belonging to the Odense Town Council, and covers an area of 800 square yards.

A railway siding, connected with the main line, runs along in close proximity to the western side of the building, giving the best facilities for the receiving and despatching of goods by rail. The east side of the building faces the quay, and the berth of the steamers to Great Britain is exactly opposite and only a few yards distant from the warehouse.

The premises in every way satisfy modern requirements, the butter cellars being equipped with refrigerating plant, and the offices with hot-water heating installation, with electric light over the whole building.

The whole arrangement is ideal, and a further testimony to the endeavours of the C.W.S. to supply co-operators with articles made and distributed under the most perfect conditions.



Odense Depot.



Herning Bacon Factory.

Herning Bacon Factory.

THIS factory, built on freehold land, was purchased in 1900, and business commenced immediately after reconstruction and additions to the buildings were completed. In 1912 the premises were enlarged and the machinery renewed, so that the factory now appears as a modern, practical, and hygienic establishment.

The front building on the right comprises the manager's and clerks' offices. On the left of this building is the main entrance, where the farmers drive in with their hogs, afterwards making their exit at the gate on the right. The building on the left of the entrance contains the weighing-room for live hogs, and sties or piggeries, while further on is the sticking-pen. Continuing and turning to the right is the slaughter-house, containing scalding-tank, singeing-stove, destruction-room, and other accessories. In the same building, but on the right, is the sausage-room, smoking stove, and lard melting-room.

Close behind the large shaft are the engine-room, boiler-house, and refrigerating machinery; the condenser belonging to the latter can be seen on the top of the roof.

The very large building consists of a well-ventilated chilling-room, also used for cutting-up, baling, and packing. In the same building are the offal delivery-room and storeroom for lard, &c.

Adjoining the large building on the left are the cooling-room and curing cellar.

On the right will be seen a fence which runs along the passage where the pigs are unloaded from the railway trucks, the railway line running close alongside, thus giving easy access for loading and unloading goods.

Sydney Tallow Works.

THESE works, for the production of tallow for use in our various soap works, are erected on a suitable and excellent site in Sydney, the position having been specially selected as being particularly adapted to the receiving of the raw material and despatch of the manufactured product. They were specially designed and built for this particular manufacture, all the machinery being of the latest and up-to-date description.



Sydney Tallow Works.



Denia (Spain) Depot: Calle Gayarre.

Fruit Packing Depot, Denia.

THIS substantially-built warehouse is the C.W.S. Depôt for the packing and exportation of Spanish produce. Denia is situated about seventy miles south of Valencia on the Mediterranean coast, and is the principal port of shipment of Valencia raisins. Co-operators' requirements of the latter commodity having greatly increased in recent years, the old rented property was found inadequate, and it became necessary to make other provision for carrying on the business efficiently. Land was bought in a central position near to rail and quay, and a large handsome building erected, 75 yards by 45 yards. This is looked upon by the natives as doing credit to the town, and without doubt is second to none in that part of Spain.

The interior is light and airy, and, with ample sanitary accommodation on the very best hygienic principles, the C.W.S. is keeping up its reputation for looking after the interest of its workers. No one arriving in Denia can fail to notice the words "Co-operative Wholesale Society Ltd.," as the warehouse abuts on a square adjacent to the station.

The walls are of thick rubble, and the columns, girders, and roof principals of iron. The bottom floor, which is used for making up, is tiled, and the upper storey, which serves as the picking department, is concreted.

During the excavations much blasting had to be done, remains of old Moorish foundations being discovered—probably those of buildings connected with the ancient castle or convent close by.

In the season upwards of 800 persons are employed in picking, packing, and shipping co-operators' requirements.

London : Tea Department.

THE Tea, Coffee, and Cocoa Departments are worked as a joint business by the English and Scottish Wholesale Societies. The premises are immediately opposite those of the C.W.S. in Leman Street, and are also conveniently near the bonded warehouses. It was in 1882 that the two great federations decided to join in the supplying of tea. The first warehouse was a small one, close to Leman Street—how small may be guessed by the fact that it employed only four warehousemen and half a dozen boys. By the end of 1885, however, the business was so important that when a disastrous fire occurred on December 30th it was sufficient to cause a loss of £35,000. No further calamity marred the steady growth of the business in the succeeding years. In 1897 the present large premises in Leman Street were opened, but within a short time it was found that much more space would be required, and extensions have recently been completed that will afford much greater facilities for the business. The factory is splendidly equipped with numerous labour-saving appliances, and the most up-to-date weighing and packing machinery is installed, which arouses wonder and admiration from everyone who is privileged to see it. The latest figures published at the time of writing give the total annual sales of tea to be 29,000,000lbs.



London: Tea Department.



Luton Cocoa and Chocolate Works.

Luton Cocoa and Chocolate Works.

IN September, 1902, this new industry was established in Luton by the opening of a factory by the Joint Committee of the English and Scottish Wholesale Societies. The manufacture of cocoa and chocolate, however, had been carried on by the two Societies in connection with the Tea Department at Lemon Street, London, since November, 1887. Thus at the time it was taken from Whitechapel into the country the business was in its fifteenth year. The reasons of removal will be easily understood. On one hand, in London, a congested district with high rates and high values generally; on the other, at the edge of Luton, open country, a dry, chalk subsoil, and economies all round. Hence the present factory at Luton.

The building stands nearly 400 feet above the sea level, and commands a view of the greater part of the town and the Chiltern Hills beyond. It is of two storeys, with a basement cut in the chalk. At the back runs the Great Northern branch line from the main line at Hatfield to Dunstable.

Here one finds all the essentials for a pure food product in a light, spacious factory, equipped with the best machinery for making a range of cocoas equal to any other make, British or foreign.

All the girls, and there are a great number, are attired in scrupulously clean dresses and caps provided by the C.W.S. Considerable extensions have been made, but there is still room for additional buildings when the loyalty of co-operators to their own cocoas shall warrant their erection.

Biscuits, Cakes, Jellies, and Sweets Works, Crumpsall, Manchester.

THESE works enjoy the distinction of being the first productive enterprise of the C.W.S. The works had been the property of private manufacturers, but were purchased by the Wholesale Society in January, 1873.

It was proposed to produce biscuits, sweets, jam, soap, and tobacco, but the latter commodity had to wait for many years. The total value of the productions for the year ending October, 1874, was £12,632, with a profit of £252. Not twenty employés were then occupied, and for the sake of comparison we note that in 1913 the output reached £200,000, with profits £16,000 and employés 600.

Scarcely a corner remains of the original buildings; additional ground has been purchased from time to time and covered with substantial buildings, spacious and airy, in every respect constituting a model factory.

At the present time the works are manufacturing biscuits, sweets, cakes, and jellies. Jam and soap have demanded separate premises for several years. In the course of time certain departments have been transferred to other centres, as for instance drugs and sundries:

About 250 varieties of biscuits are made at Crumpsall, and fresh designs and flavours are constantly being introduced. It is almost needless to say that scrupulous care is exercised in the selection of ingredients, in the manufacture, and in every process involved. The girls are provided with overalls and caps.

In the cake bakery fifteen large ovens are occupied in turning out huge quantities of toothsome cakes, from the plain cake to bridecakes of highest quality.

Boiled sweets have a department to themselves. Here, again, a visitor would be convinced of the purity of Crumpsall products. He would see kegs of pure butter, cans of new milk, gallons of cream, bags of cane sugar, essences of flavour harmless and of the best quality.

Crumpsall is second to none in the social welfare of the employés. Besides the bowling green, croquet lawn, tennis courts, cricket and football grounds, there are a harriers' club, swimming clubs, physical culture classes, and also tents pitched in a beautiful part of Derbyshire for week-end camping.

Last, but not least, we have at Crumpsall the only biscuit factory in England working an eight-hour day.



Crumpsall Biscuits, Cakes, Jellies, and Sweets Works.



Preserve, Marmalade, and Peel Works, Middleton Junction.

Middleton Junction Preserve Works.

THE C.W.S. first began to make jams and marmalade at Crumpsall Works in 1888. The department succeeded so well that it was formed into a separate branch of manufacture, and was housed in the factory which the C.W.S. built on ground acquired at Middleton Junction. In June, 1896, with the fruit season of that year in view, work was commenced, and some 3,000 tons of jam were made in the first twelve months. Several extensions have been added, and in 1909 the removal of the pickle and sauce department to the adjacent vinegar brewery secured the whole of the original building to the manufacture of jams and marmalade, mincemeat, and peel. There is also a good trade in tinned fruits and potted fish and meats. At the present time the yearly output of jams and marmalade exceeds 10,000 tons. The permanent staff here consists of 600 employés, but this is increased during the season by four or five hundred workers engaged in picking and sorting fruit.

The works are admirably placed for dealing expeditiously with the traffic, being close to the main line of the Lancashire and Yorkshire Railway, to which there is direct communication by sidings. In July and August it is no uncommon event for two or three train loads of twenty wagons each to arrive at the works. Considerable quantities of the fruit come from the C.W.S. fruit farms at Roden and Marden and their Depôt at Wisbech.

The marmalade trade consumes five or six hundred tons of Seville oranges, which are bought direct by the C.W.S.

In the other departments of the factory, *i.e.*, those devoted to the production of candied peel, mincemeat, tinned fruit, and potted meat, there is the same careful supervision of detail that ensures the purity and excellence of the comestibles sold by the C.W.S.

Vinegar Brewery and Pickle Factory, Middleton Junction.

EXTREMES met in the C.W.S. Jam Works at Middleton Junction for many years, as both preserves and pickles were there manufactured. When, however, the Committee decided to erect a vinegar brewery, it was obvious that pickles would properly form an adjunct thereto. The brewery is of the very latest type, and contains a complete equipment of plant of the most approved type for the production of a high-class vinegar. The provision made for storage is convincing proof that the brewery will prove equal to the demand for some years to come.



Vinegar Brewery and Pickle and Sauce Factory, Middleton Junction.



Leicester Wheatsheaf Boot and Shoe Works.

Wheatsheaf Boot and Shoe Works, Leicester.

CO-OPERATORS should be proud to own this, the largest shoe factory in the United Kingdom. The C.W.S. commenced the manufacture of boots and shoes in 1873, when they purchased a small factory in Duns Lane, Leicester, but this was soon found to be too small, and extensions were made in 1876 and again in 1884.

On November 4th, 1891, the Wheatsheaf works were opened. Covering something like two acres of ground, the building, viewed from the Midland Railway main line, presents a striking appearance, and is by far the largest in the kingdom. A glance at the illustration will show the general plan of construction, the principal feature of which is the main room occupying the centre of the building, roofed with iron and glass, the actual area of which is 6,600 square yards.

In every department may be seen the most ingenious and modern machines invented for the boot and shoe trade, and the management is constantly on the alert for any improvement in this direction that can possibly add to the efficiency of the works. How extensively machinery enters into boot production may be gathered from the fact that there is not a department into which it has not been introduced. As a hint to co-operators who do not insist on getting Wheatsheaf boots or shoes, it may be mentioned that the factory is capable of turning out 50,000 pairs weekly, instead of 35,000, which quantity represents the present normal average demand.

The following figures speak for themselves:—

	Pairs.	Value.
Supplies, 1874	—	£29,456
„ June, 1913, to June, 1914	1,742,966	£445,453
Paid in Wages, 1874		£9,678
„ „ June, 1913, to June, 1914		£122,244

The total profit realised up to and inclusive of June, 1914, was £181,077, and the sum devoted to interest and depreciation £231,428. The whole cost of the machinery—as well as the building—has been “wiped out” by depreciation.

The output for June, 1913, to June, 1914, as shown above, *beats all records*, the pairs sent out for the half year ended June last being 1,045,237. Never before has it reached the million.

The factory is devoted to the manufacture of all kinds of footwear—men’s, women’s, boys’, girls’, and nurseries—for all co-operators.

In April, 1913, a Closing Factory was established at Wellingborough in order to do, under our own control, closing previously given out to be done, and in conjunction with the same we have commenced the manufacture of leggings and gaiters, so that we are now in a position to supply co-operators with *our own productions*, and trust this department will receive full support.

Leicester (Duns Lane) Boot and Shoe Works.

THIS is the factory in which the C.W.S. commenced its shoe manufacturing in 1873. The present factory is very different from the original one, which was purchased and opened in 1873, because in the extensions in 1876 and 1884 the original building was entirely demolished. The present building is triangular in shape, with one of the long sides of the triangle fronting Duns Lane, and one side to the river Soar.

The factory is lit by electricity and driven by motors, thus making it in every way a modern factory.



Leicester (Duns Lane) Boot and Shoe Works.



Enderby Boot and Shoe Works.

Enderby Boot and Shoe Works.

ENDERBY is some four and a half miles from Leicester, and rather less across country from the Wheatsheaf Works. The route is across the green vale of the Soar, past the pretty Aylestone Church, where Dorothy Vernon was married after the famous elopement from Haddon Hall, in Derbyshire, and thence up gently-sloping ground to the large, but clean and quiet, village of Enderby. There are thatched cottages and a thirteenth-century church, recently restored, and at least one little street of red-brick houses, wherein is the C.W.S. factory.

In the appearance of the building outside there is nothing remarkable, and inside one finds the most modern plant for boot and shoe manufacture.

It is considered the best fitted-up factory outside the town, and is driven with suction gas engines and dynamos generating electricity for lighting and for the motors which drive the machinery, all being now driven by motors. The factory is devoted to the manufacture of women's and girls' strong boots.

Heckmondwike Boot, Shoe, and Currying Works.

IN the West Riding of Yorkshire, in the heart of the industrial area of broad acres, lies the small factory centre of Heckmondwike, and here is situated the substantial structure above named. The factory is in two portions, the older—acquired in 1880—forming one-half of a square, and the newer—erected in 1896—making a square within the angle of the old.

Currying, first began by the C.W.S. in 1887, is done in the older portion. Before being exported the hides are sun dried, shorn of hair, purified, softened, and partially tanned. On reaching the Heckmondwike Works the hides undergo a long series of operations—trimming, soaking, softening, shaving, splitting, tanning, scouring, graining, &c., &c.—all performed with characteristic thoroughness.

The newer building is devoted to boot making, heavy work being the speciality. Without pursuing our “leather hunting” through the various processes in which fifty different machines perform as many different operations, a visit to the sample showroom reveals a remarkable collection of footwear. Newcastle colliers, Welsh miners, farmers, policemen, carters, quarrymen, and navvies are all catered for, and the lighter but none the less wear-resisting boots for healthy and restless school children are turned out.

Some 400 persons are normally employed, and these enjoy, in addition to the trade union standard of hours, rates of pay that are slightly above those paid in the district.



Heckmondwike Boot, Shoe, and Currying Works.



Rushden Boot and Shoe Works.

Rushden Boot and Shoe Works.

“NORTHAMPTONSHIRE.” The mention of the word immediately brings to one's mind boot manufacture. The county town and district have a world-wide reputation for the production of gents' high-class boots. Rushden—fifteen miles from Northampton—has developed into a very important centre for the production of footwear.

Up to the year 1900 we had been drawing supplies from this district to such an extent that it was thought advisable to purchase a factory and commence manufacturing our own goods. This was done in March of that year, the venture proving a success by the flow of trade to the works. Buildings and extensions have taken place until we have these large and extensive premises, each of the two floors containing some 600 to 700 square yards. A large and well fitted up stockroom has been added so that a supply of boots may be kept in stock ready for despatch, thus obviating, as far as possible, any inconvenience to Societies who require urgent deliveries.

Each department is replete with the most modern machinery, including a large plant for the production of welted goods, which trade has grown very rapidly, and the Societies can now get supplies of every description in medium and high-class gents' and boys' footwear.

Leeds Boot and Shoe Works.

THE continued and ever increasing demand for Heckmondwike goods rendered it imperative for the Directors to provide additional producing accommodation. It was impossible to extend the works at Heckmondwike for various reasons, and Leeds was chosen as the most likely for two reasons, viz., its commercial importance and its abundant supply of trained labour.

The Buslingthorpe district of the city of Leeds has long been noted for its leather and tanning industries, and the Directors secured a suitable site in the heart of this district, within one mile of the railway stations. The selected site was formerly known as the Sheepscar United Leather Workers' Cricket Ground, familiar to all Leeds people as the former property of Lord Allerton.

It is on two main tramway routes (Meanwood Road cars pass the factory), and is immediately adjoining two fine blocks of buildings, the Council Schools and the Public Baths.

As will be observed from the illustration, there is the minimum amount of brickwork and the maximum area of glass, while inside it contains four large well-lighted and commodious rooms fully equipped with the latest and most modern boot-making machinery.

The building has been constructed on the most hygienic principles, and every provision is made for the comfort and welfare of the employés. Thus it may be claimed, without exaggeration, that this Leeds Factory is the most up-to-date building of its kind in the country.

In the centre of the plot is the power-house, containing plant, &c., for the production of necessary energy for all lighting and motor-driving purposes.

It is estimated that there is sufficient factory accommodation to produce 4,000 pairs of boots weekly, and, if the demand justifies, there is ample space for any necessary extension.



Leeds Boot and Shoe Works.



Irām Soap, Candle, Glycerine, Lard, and Starch Works.

Soap, Candle, Glycerine, Lard, and Starch Works, Irlam.

THE group of factories at Irlam have not come together in any haphazard way, but because of certain features which distinguish them from most of the other C.W.S. productive enterprises. Here the soap, candle, starch, and lard factories are distinctly branches of chemical industry, in which the highest degree of specialised knowledge is required.

Thirty-nine years ago the C.W.S. bought a small factory at Durham, originally occupied by candle factors, and began to make soap. Progress was slow owing to prejudice on the part of Societies. For the first complete year of working, 1875, the sales were only £8,900, and in ten years after this amount was not even doubled.

The construction of the Manchester Ship Canal afforded a unique opportunity for the erection of a soap factory upon its banks, and the C.W.S. acquired thirteen acres of land at Irlam, eight miles from Manchester, and started erecting the works which were opened in October, 1895. A lay-by or quay was also constructed, thus enabling vessels to bring their cargoes direct to the doors of the factory.

Every kind of soap is made at Irlam, for domestic and toilet purposes, disinfectant soaps, polishing soaps, and all under the constant supervision of practical chemists.

The increased space available at Irlam offered sufficient accommodation for the additional manufacture of candles, starch, and lard refining, all of which products enjoy a constantly growing popularity among the constituent Societies.

Soap Works, Silvertown.

IT is to the soap combine of 1906 that the co-operative world owes the existence of the Silvertown and Dunston works. Successful at that period in meeting demands which increased from 250 tons to 750 tons per week, the Co-operative Wholesale Society is now equipped for much larger demands than have hitherto been made. Though after the breaking of the combine the demand—owing to the short-lived public memory—fell considerably, we were able to report that the total trade for the half year ended June, 1912, averaged 660 tons per week. Since then labour troubles and increased prices of soap have again opened the eyes of co-operators to the fact that it is through their own sources that the surest and cheapest supplies are to be obtained. This recognition has resulted in the satisfactory fact that for the half year ended June, 1914, the total output of the soap works has averaged 900 tons per week, whilst Silvertown portion of this amount has been 177 tons per week. It is to be hoped that co-operators will soon fully recognise that it is to their benefit to utilise their works to the utmost.

Standing on the Thames side, and with direct facilities to the Great Eastern Railway, these works offer every advantage for the expeditious handling of both raw material and finished soap. The works are constructed on the most scientific lines, all machinery being driven by electricity, whilst all workrooms are light and airy.



Silvertown (London) Soap Works.



Dunston-on-Tyne Soap Works.

Soap Works, Dunston.

ORIGINALLY it was intended to build the Newcastle District soap works on a larger stretch of ground at Pelaw, but eventually it became necessary to fall back upon the Dunston site. At Dunston, however, considerably less than an acre of land was available. The river, a road, and a railway, the C.W.S.'s own flour mill, and a ferry pier formed on all sides irremovable boundaries; but, in the end, a works has resulted which is extremely compact, and yet is light and roomy and pleasing within and without.

The basement of the works—a kind of modern crypt under the frame-room—is level with the wharf. On the latter is an electric crane for hoisting out barrels of tallow or other materials coming by water. Liquids, such as tallow, after being melted in the basement, or the caustic solution, are pumped up from below to the pan-room (on the highest floor of the works), to which solid materials are taken by lifts. From there the materials descend in the course of manufacture to the ground floor, level with the trucks that run on a railway siding into the loading-way. It will be seen from this that neither time, space, nor power is wasted.

Batley Woollen Mill.

THE Batley Woollen Mill was originally owned by a Workers' Productive Society, which commenced business in 1871, but after twelve years' adventures in the troublous realms of commercial enterprise, the results achieved not encouraging further effort, the concern went voluntarily into liquidation, and the C.W.S., being large mortgagees, acquired the property. In 1886 the Society began to manufacture woollen goods on its own account. Early financial results were not promising, but in 1890 the mill was placed under its present management, and since that time good progress has been made, many extensions having been added to meet the increasing trade, which last year amounted to over £60,000.

The co-operative demand is of a complex character, and naturally the policy of the management is to meet to the full extent their responsibilities to the organised consumers; therefore the production ranges from the highest to the lower grades of cloth. Of the former it is claimed that the quality is equal to any manufactured in Yorkshire or elsewhere. A speciality is blue serge, but the better class fancy tweeds are also woven, and compare favourably with any on the market. Of the lower grades it must be stated that they wear well and are of excellent finish, and place comfortable clothing of co-operative manufacture within the reach of the humblest co-operator.

The wool used for the purposes of manufacture has originally come from Australia, and, to some extent, from the home counties.

It is impossible here to detail the various stages of manufacture, but it may be said that all the operations necessary for transforming the wool into the finished cloth are carried on with the exception of spinning the worsted yarn used in serges, &c. The machinery is of the best and latest type, and the general appearance of the rooms is much in advance of the majority of mills of this class. The number of employes exceeds 250, trade union rates of wages being paid, and the hours worked per week are 53, against 56½ in the trade. Designers are constantly engaged in creating new patterns and colour combinations, and the co-operator buying his new suit, if he desires satisfaction, can rely upon Batley productions.



Batley Woollen Cloth Factory.



Leeds Clothing Factory.

Clothing Factory, Leeds.

LEEDS is the natural centre of the ready-made clothing trade, and in 1890 the C.W.S. transferred this branch of industry from Batley Mill to Leeds (Harper Place), then to the factory known as the Mint, at Holbeck.

During the past few years very many alterations and extensions have been made, and the factory is one of the most up-to-date of its kind.

On the left foreground is the receiving-room, where large quantities of cloth arrive, and is stored in the three-storeyed warehouse here shown. In the cutting-room adjoining a staff of 60 men and youths are continually employed. Immediately behind there is a spacious room wherein are situated 600 electrically driven sewing machines. From 800 to 900 females are employed, and in the busy season this number is considerably augmented. The next room is occupied by the finishers, and many ingenious machines are here found.

On the extreme background (right) is the pressing-room, where about 40 men are occupied, and adjoining is the room where the final process—that of “passing”—takes place before the garments are taken into the despatch-room. The lower floor of this warehouse is used exclusively for direct orders to north-country Societies.

Thus we have an entirely modern factory, where the whole operations, from cloth to finished garment, are carried out on the one level.

These works, when extensions are completed, will provide accommodation for 2,000 employés, about double the number of the present staff. A fine dining-room is in course of erection, which will also be used by employés for social and recreative purposes.

Broughton Tailoring Factory.

BESPOKE tailoring was first made in a small building in the vicinity of Balloon Street. The department was worked in connection with the Distributive Department, and only one or two cutters and a few machinists were employed.

In 1905 the removal to Broughton occurred, and the value of supplies for the first six months totalled £7,561. In 1897 the trade amounted to £27,010, and new premises, shown in the block opposite, were built. In 1901 the figures had increased to £40,180, whilst in 1913 the total trade amounted to £58,150.

The whole of the machining and finishing work is done by female labour, the cutting and pressing by men, and the employés number 700. Trade union rates of wages are paid, and the arrangements for the lighting and ventilating of the whole of the factory are excellent. Another feature is that no attempt is made to obtain cheap labour by taking on learners and dismissing them when they are fit to go on full piecework wages.

The larger part of the trade is, of course, bespoke work, and from March to August the resources of the management are taxed to the utmost in meeting the demand, but after this busy period comes the "off season"—September or October until February—when, in order to mitigate slackness, the work is supplemented by the making of ready-mades.



Broughton (Manchester) Tailoring Factory.



Pelaw Clothing Factory.

Clothing Factory, Pelaw.

THE building bearing the name of "Tailoring Factory" contains four departments; on the ground floor the kersey department, wherein is manufactured miners' and artisans' clothing; the tailoring department, for the production of bespoke clothing; the top floor is devoted to the manufacture of men's woollen shirts and ladies' underclothing; the first floor is the cutting-room for tailoring, shirts, and underclothing, and stockroom for the above departments.

All machines are of the high-speed type and electrically driven, like all the machinery at Pelaw. The girls use patent adjustable seats, which add much to their comfort; the workrooms are light and airy, and labour is lightened by the use of machinery in every direction. Wages are fixed by piece work, and also hour work, the rates being above the average in the district.

Shirtmaking was started at Pelaw, twelve years ago, in a small way, but now 270 machines are employed in the four departments.

London: Clothing Factory.

THE Clothing Factory, situated in Grove Street, London, E., is five minutes' walk from the central premises of the London Branch, and caters for the bespoke and ready-made clothing trade of the Societies in the London district, including the West of England and South Wales. It gives employment to fourteen expert cutters, whose labours are assisted by a power-driven band-knife. There are also fifty power-driven sewing and buttonhole machines. The pressing is done by men, using self-heating gas-irons. The cutting-room occupies the ground floor, and the trousers and vests are machined on the floor above. On the second floor is the sorting and examining room, while the machines in the room above are devoted to coat making. The factory employs a staff of 132 hands. Two stone staircases, one at each end of the building, give adequate means of exit in case of fire; the air space is ample, and the sanitary arrangement all that can be desired. The wages paid are the best London rates, and a general air of contentment pervades the factory, while the workers, the pick of their class, all look the picture of health.

The smaller building, conveniently situated next to the tailoring factory, is used as a woollen cloth warehouse, where the productions of Batley Mill are to be found.



London : Clothing Factory.



Leeds Brush and Mat Works.

Leeds Brush and Mat Works.

THE C.W.S. first began to make brushes in connection with the Furnishing Department at the London Branch. In 1904 the industry, for various reasons, was removed to Leeds and reorganised. About the same time the Co-operative Brush Society in Huddersfield was taken over, and later was incorporated with the Leeds factory. First situated at the Mint, Holbeck, the works were afterwards removed to Hunslet, on the south side of the city, where there is plenty of room for expansion. Fostered under careful management, the factory has made rapid headway, and it now claims to be the most up-to-date of its kind in the country.

The housewife's brush, though not an aid to the highest artistic expression, is a homely and useful article, and all the quarters of the globe are under contribution to the manufacturers of the various kinds. Beech is the chief wood, but chestnut, lime, alder, sycamore, and Swedish silver birch are also used. Bristle, in addition to the home supply, comes to us from France, Germany, Poland, Roumania, Russia, Siberia, and China; bass is produced chiefly in Brazil and Africa, and bassine in Ceylon. Besides these two materials other fibres are used—Mexican whisk, French whisk, Italian sedge, and cocoanut fibre. Both by hand and machine these materials are manipulated until they assume the various forms of bass brooms, banisters, shoe, blacklead, and other brush shapes.

Mats are also made here. Woven of cocoanut fibre or yarn, the manufacture has hitherto been done by hand, but after eighteen months' experimenting a practical loom has been installed which will enable the factory the better to compete with the Belgian gaol-made article. Whilst having the virtual monopoly of this contrivance, it is necessary to remember that the aims and results of collective ownership are altogether different to those of individual proprietorship.

Notwithstanding Continental competition, made severe by means of cheap labour, the 230 employés are paid union wages—indeed, the women machine workers are remunerated at higher rates than are paid in the outside trade.

Brislington Butter Factory.

THIS factory has been erected at Brislington, Somersetshire, with the primary object, not of producing butter itself, but to blend and pack butter obtained from various sources, to meet the requirements of numerous Societies. We distinguish such blending places as "factories" as against "creameries," where butter is actually produced straight from the cream. It is a distinction worth noting, as the two terms are often confused, but are not in any way synonymous.

Business commenced in June, 1904, and the trade for the half year was £12,000. Sales have steadily increased, and now the total trade done in twelve months exceeds £300,000.

The productions have met with the approval of Societies to such an extent that the factory and plant have been duplicated. The factory has now greater facilities to cope with the steadily increasing demand for its products. The motive power is different to that usually employed in butter factories, the various machines being driven by electric motors. The present capacity is from 60 to 70 tons per week. The greatest proportion of the output is in 1lb. and $\frac{1}{2}$ lb. tablets and prints. Butter is also packed in 1cwt. casks and 56lb. and 28lb. pyramids. Supplies of cream can be obtained throughout the year, packed in attractive jars for counter trade, and in bulk for confectionery departments. The factory has taken up the manufacture of Lactic Cheese, put up in dainty packages. There is an increasing demand for this delicacy, and trade is rapidly developing.



Brislington Butter Factory.



Dunston-on-Tyne Flour Mills.

Flour Mills, Dunston.

THE question of flour milling by the C.W.S. was first discussed in 1883, as the quantity of flour consumed in the Newcastle district was then held to justify such a venture. Finally, it was decided in 1886 to proceed, and the site purchased at Dunston-on-Tyne. Although many obstacles hindered the progress of the work, it went steadily forward, and on April 18th, 1891, the mills were opened.

The building containing the flour milling machinery is situate in the background of the view, and the new circular grain silos are close to the river front, while to the immediate right is to be seen the building containing the wheat cleaning, &c., machinery. The mills are divided into three distinct plants, giving a total milling capacity of about 90 sacks of flour per hour. The circular grain silos have a storage capacity of 15,000 tons of wheat, and vessels come direct alongside the premises where the wheat is discharged by means of powerful ship-elevators. Along the side of the premises opposite to the river is the railway siding with three sets of railway lines, giving facilities for loading a train consisting of 35 wagons. The whole of the machinery is driven by electric power.

Flour Mill, Silvertown.

WHEN the demand arose for a flour mill in the South it was this position, full on the Thames, with railway and road in the rear, that induced the C.W.S. Committee to purchase five acres of freehold land at Silvertown. If we remember how many of the large Societies in the South of England are in towns situated on tidal waters, we shall see that, apart from the facilities for receiving sea-borne wheat, the water communication has for the Silvertown Mill an especial value. To build, however, on the light gravel of the river bank was not a simple matter. Sixty five-foot cylinders, in 300 six-foot sections, had to be sunk through the surface drift and filled in with concrete. On this solid foundation the mill was erected by the C.W.S. Building Department, London. The Great Eastern Railway added a siding communicating *via* Stratford with the great main lines, and on June 20th, 1900, the mill was formally opened.

At the start the capacity of the machinery was 12 sacks of 280lbs. each per hour. It is now 50 sacks per hour.

The provender mill is now in full work for the supply of cattle feeding-meals, poultry mixtures, &c.



Silvertown (London) Flour Mill.



Sun Flour and Provender Mills, Trafford Wharf.

The Sun Mills, Manchester.

WHEN the Sun Mill was bought eight years ago it had a capacity of between thirty and forty sacks per hour. This, being quite unequal to the demand, had to be increased. A new screen-room, where the wheat is washed and dried, replaced the old small one. Then came the problem of storage room for the wheat. To solve it the original warehouse and provender mill were turned into silos. The old office, a small chop warehouse, and a cottage were pulled down, and in their place a new warehouse and provender mill erected. Meanwhile the plant of the flour mill had been increased until it was equal to an output of seventy sacks per hour. All this took place in the first three years of C.W.S. ownership.

Trade for a short time was hardly sufficient, but as the quality of the flour became better known it grew to the normal power of the mill. For twelve months, perhaps, demand balanced fairly with supply. Then difficulties again began. The demand for the flour gradually increased out of all proportion to the mill's power of supply. A new mill has therefore been erected. It provides ample storage for wheat by means of ferro-concrete silos, which, together with the old ones, have a capacity of 20,000 tons. There is a washing and drying plant for dealing with this great quantity. Then there is the mill proper, with two complete plants each capable of 35 sacks per hour.

Except through such a federation as the C.W.S., no body of consumers could possess so stupendous a mill. The capacity of the old and new plant together is an output of 140 sacks *an hour*. For three years the old mill has worked over 160 hours a week to keep pace with orders. Now, with double the capacity, the mill can meet every demand immediately. Thousands of pounds of co-operative capital have gone to its erection. To keep it idle a day would be equivalent to flinging 250 golden sovereigns into the Ship Canal. To withhold orders is as foolish as, after building such a mill, to refuse it wheat. There was far-sighted wisdom in its erection, but its ultimate justification and the final responsibility for its success rests with the co-operative purchaser and her demand for C.W.S. flour.

The Star Mill, Oldham.

THIS mill, founded in 1868, was originally started by the two Societies in the town to provide for their own needs and those of the neighbouring Societies. When first started the flour was made by the old-fashioned millstones, but the directors were amongst the earliest to put in a roller plant when rolls for flour grinding were introduced.

In 1889, when one-half the mill had just been remodelled and brought up to date, a disastrous fire occurred, which totally destroyed the mill and warehouse. The insurance did not wholly cover the contents of the mill and stocks of flour, and there was a loss of £3,500 as a result of the fire.

Notwithstanding this loss, the fire was not altogether a disaster. The directors of the mill were enabled to erect new buildings, which were altogether more suitable for a modern flour mill roller plant than the old buildings had been, they having been built for the millstone plant.

The present buildings were erected in 1890, and the new mill was fitted up by Messrs. Thomas Robinson and Son, of Rochdale, with thoroughly efficient and up-to-date plant. From time to time as improvements in corn mill machinery have been made they have been introduced into the Star Mill. The whole plant has been kept in a highly efficient state, and down to the present time the results, both as regards quality of the flour and the profits, have been most satisfactory. The capacity of the mill is 32 sacks of 280lbs. each per hour.

Although an inland mill, the cost of getting the wheat from the Manchester Docks is very low. The bulk wheat is loaded into motors specially adapted for carrying wheat in bulk, and discharged into elevators in the mill yard. Although not enjoying the exceptional advantages of the Sun Mill in regard to dock accommodation, the Star Mill has all the best facilities which an inland mill can possess, and there are a number of large Societies in close proximity to the mill who take the largest percentage of the flour. The quality is well known and highly appreciated, and since this mill was taken over from the Star Mill Flour Society by the C.W.S. it has in every possible way been a most satisfactory concern, and for every sack of flour that could be made there has been a good demand.



Star Flour Mill, Oldham.



Ayonmouth (Bristol) Flour and Provender Mills.

Flour and Provender Mills, Avonmouth.

A FEW minutes' walk from the modest railway terminus brings the visitor to the mill, and the value of its situation is almost immediately obvious. A network of Midland and Great Western lines surround it; the grey ferro-concrete granary stands beside it; and the deep dock is at hand from which the great Australian wheat ships, laden with their thousands of quarters, can discharge direct into the mill silos.

The fresh, clean aspect of the mill outside is not belied within. Modern milling machinery is largely boxed in, and floor after floor shows nothing but smartly-varnished cases, in which panes of glass are set to show the fine stream of flour smoothly and swiftly running like water over a weir. Much of the machinery, too, is connected from floor to floor, so that a main part of the mill resolves itself simply into one huge machine, the separate floors being merely platforms by which to reach its parts.

The Provender Department forms a well-equipped part of the mill. Here English barley, maize, and various cereals are cleaned, mixed, split, and ground, and bird food, chicken food, pigeon corn, &c., are prepared.

At present there is difficulty in coping with the great demand for flour, but arrangements have been made for doubling the milling plant in order to relieve the situation.

Broughton Shirt and Cabinet Factories.

A WALK of ten minutes from Balloon Street, through a neighbourhood where the chief features are the Assize Courts, Strangeways Gaol, and a Jewish population whose labour is largely exploited by capitalistic enterprise, brings us to Trafalgar Street, Lower Broughton, in which the Shirt Factory is situate. This factory began operations in 1896, but owing to increasing trade demanding alterations and extensions the original building is hardly recognisable in the block opposite.

Space does not permit of a description of the various operations of cutting machinery, folding, &c., but an idea of the extent of the business carried on may be gathered from the fact that over 600 employes are busily engaged, hundreds of thousands of yards of shirting are held in stock, and the output is 36,000 garments per week. Mention must be made here that, in addition to the making of shirts, duck jackets, overalls, artisans' jackets, &c., are among the garments produced. The business has grown from a turnover in the first year of £13,822 to £150,000 in 1913.

Visitors to the works are impressed by the up-to-date machinery, the systematic manner in which so large an output is dealt with, the light, airy, and spacious workrooms, and the spirit of contentment prevailing among the workers. The normal hours worked are forty-eight per week, no stoppages are made for needle and thread, and piecework wages are paid considerably in advance of the rate outside.

Cabinet making by the C.W.S. commenced in 1893. Prior to this date furniture was bought "in the white," polishing, &c., being done at Balloon Street. In compliance with the demand of the delegates the present factory was erected, the first of the Broughton group. It is not intended to detail here the various vicissitudes to which this enterprise has been subject; suffice it to say that the factory experienced a lean period extending from the commencement to 1905, but since this date progress has been made, other branches of trade added—viz., chair-making, upholstering, bedding manufacture, and down quilt making—and the outlook at the present time is much brighter than at any other period in the history of the factory. The goods are second to none, and are made of sound materials by well-paid trade union labour and under the best conditions. When co-operators overcome the present-day tendency (which should be repugnant to them) of purchasing goods in the cheapest market, no matter how and where they are made, and give their practical support to the factories worked for the mutual benefit of themselves and the workers, there will be an increase in trade at Broughton to which the management is thoroughly entitled.



Manchester: Broughton Shirt and Cabinet Factories.



Pelaw Cabinet Works.

Cabinet Factory, Pelaw.

THE arrangement of these buildings has been made with the greatest care and forethought. Economy in transit, unloading, and storage are followed by a carefully-planned system of putting the work through inside the factory; from the rough log to the finished article no point is missed. At the back of the factory one looks down from the level of the yard on to the railway siding, into which the wagons of timber are shunted. A travelling electric crane here renders great service by directly transporting the logs from the railway to the timber store and saw shed.

Every possible precaution is taken to ensure the proper drying of the wood, and the heat from the boilers of the power-house is utilised for this purpose. The factory is replete with the most recent inventions in the way of machinery, and in addition is fitted with a system of exhaust pipes which suck the dust and shavings from the machines and deposit them in the boiler-house. There has lately been added some new machinery for the washing, pulling, and sterilising of flock, and also two machines for the purifying and sorting of feathers, thereby ensuring complete cleanliness and purity in the making of mattresses and beds, &c., for which there is now a very great demand in the district. There are no productions of the C.W.S. more worthy the support of the Societies, as an inspection of the showrooms at Newcastle would prove.

Broughton Mantle and Underclothing Factories.

LADIES' mantle and costume making by the C.W.S. began in 1896. Six employées were then engaged, and the work was carried on in a corner of the Shirt Factory. In accordance with the rule associated with C.W.S. enterprise, the trade grew until the present up-to-date factory was erected, in which over 300 hands are employed, and a glance at the pattern and design books issued by this factory will bring conviction that the costumes, &c., turned out should satisfy even the most fastidious of the fair sex. Considering the fickleness of the English climate it is not a matter for wonder that the factory should also specialise in rainproofs. The same remarks as to conditions, &c., applying to other C.W.S. factories, are also relevant here. From the first operation of cutting the cloth by the band-knife to the pressing of the garments by irons, heated with hot air and gas, the dropping and lifting being controlled by the foot, numerous labour-saving machines are at work. We see the braiding; button-holing, two-needle, overlocking machines all electrically driven, and one is amazed at the ingenuity of these machines, but in the case of the C.W.S. that ingenuity has been applied not for the destruction, but for the construction of a system for the uplifting of humanity.

The same block of buildings houses the Underclothing Factory, and here again we have the light, airy, and lofty workrooms. A multiplicity of articles of women's and girls' attire come under the category of "under-clothing," but to the masculine mind the machinery in this factory again appeals in preference to their delicate productions. Here again are the overlocking machine for stitching on elegant borders, hemstitching and tucking machines, and electric irons for the finishing process. A speciality is the making of overalls or magyars—a useful article which has found much feminine favour.

The two factories described produce all the necessary articles, except head and footgear, the completeness of which is a tribute to the method and efficiency of the management.



Manchester: Broughton Mantle and Underclothing Factories.



Desborough Corset Factory.

Desborough Corset Factory.

THE Corset Factory was originally a member of the Broughton group, and it began operations on October 20th, 1898. A few years sufficed to prove that at some time in the future larger premises would be required, and the attention of the Wholesale Committee was drawn to Desborough. The Northamptonshire township had a claim to be considered as a corset-making centre, and it also made a strong co-operative appeal. The distributive Co-operative Society at Desborough, besides enrolling the greater number of the inhabitants, had attained a unique position. With the help of a loan secured from the C.W.S. it had purchased (in 1898) a freehold estate of over 400 acres, carrying with it the local Manor House. Under 80 acres of this land a bed of iron ore, sufficiently valuable to recoup the Society for the whole first cost, was afterwards found. The Desborough co-operators decided to work this themselves; and, under the circumstances, to find employment for the girls and women of the village, they were ready to offer the C.W.S. special terms. At the Quarterly Meetings in December, 1904, the Wholesale Committee obtained approval for a purchase of 7,556 square yards of building land, fronting on the Rothwell Road, Desborough; 500 square yards adjoining were afterwards bought. Meanwhile the existing Desborough Corset Manufacturing Society was taken over, and finally on July 3rd, 1905, the whole of the business was transferred to the fine new factory which by that time had been erected on the Rothwell Road site.

Longsight Printing Works.

WHEN the annual sales of the C.W.S. approached £10,000,000 the question presented itself whether the demand for printing, books, and stationery consequent upon such a huge business could not be met by the Society itself. The question received an affirmative answer, and in 1895 work was begun in a small way in a warehouse that stood upon part of the site now covered by the Bank. The venture proved successful in so many ways that it was realised that the available accommodation would speedily prove inadequate. Building operations were then begun on a plot of land at Longsight, already owned by the C.W.S., and close to the tram route. The new works were ready in 1898, and the 100 employés then engaged had ample space for the performance of their duties. Now, in 1914, the staff is nearly 1,200, a fact that testifies eloquently to the progress of the works. In 1902 an extension to the works was made, and in 1906 another wing of five storeys was opened, and now the capacity of the works is tested to its full extent.

The whole of the allied trades connected with the printing business are engaged in these works, and thus the diversity of work carried on is too great to specify in detail. Besides the production of account books for the C.W.S. and its constituent Societies, and balance sheets, the works have dealt with many jubilee histories for a large number of Societies, in quantities ranging from 30,000 books of 700 pages each to small orders of one or two thousand. Here also is produced the "Wheatsheaf," a monthly journal published for about 500 Societies, who contribute pages of local interest to their special editions. A total circulation of nearly 550,000 monthly has now been reached. A fine range of lithographic machinery is always busy with box labels, &c., and towards Christmas with many thousands of almanacs. Box-making is also an important feature of the works, as the extent and variety of the C.W.S. industries call for an incessant supply of boxes literally by millions.



Manchester: Longsight Printing Works.



Pelaw Printing Works.

Printing Works, Pelaw.

THIS department commenced at West Blandford Street in the spring of 1898, in connection with the paper department which had been started previously, and in July, 1902, a removal took place to the new works at Pelaw, where the paper and printing departments were carried on jointly up to June, 1908, when, consequent on the necessity for a greater development of the two branches of business, it was deemed advisable to separate the two departments, and leave the printing and allied trades the full use of the Pelaw Works.

As in most of the C.W.S. factories, white glazed bricks are used to line the walls inside. The lighting of the rooms is thus very much improved, while cleaning is a matter of the greatest ease. Not merely is dirt less liable to lodge on the porcelain surface, but it shows itself to the eye at once when there. The rooms are all heated and ventilated by the Sirocco system. Large air ducts lead from the heating apparatus, which is in a small separate building, to each room. A powerful fan drives the warm air through these pipes into each room. The air supplied has the normal amount of moisture in it, and is much more healthy to breathe and work in than the dry heat of a room warmed by radiation from hot pipes or metal surfaces.

The equipment of the works is of the most modern character, a large addition having been made to the plant during the past three years. The works, which are lighted and machinery driven by electricity, cater for the full requirements of the C.W.S. works and departments, as well as Societies in the North, for every description of printing, bookbinding, cardboard box-making, &c., and the trade is a constantly increasing one.

Leicester Printing Works.

THESE premises were originally occupied as the hosiery factory, but when the new factory at Huthwaite was completed and the business transferred it was decided to utilise the building as an auxiliary printing works. To this end certain necessary alterations were made and modern machinery installed, and a start was made in March, 1909. In 1912 a further plot of land was secured and a large extension to buildings made, and the capacity of the works doubled. New machinery has been installed to deal with the growing trade. The works can execute orders for all kinds of printing, bookbinding, ruling, and box-making. In the last-named industry over 50,000 boxes are turned out weekly for our own boot works, and millions of cartons of all sizes for various packed goods.



Leicester Printing Works.



West Hartlepool Lard Refinery, &c.

West Hartlepool Lard Refinery, &c.

THESE modern premises (which are situated at the corner of Oxford and Baltic Streets, the main entrance being from Oxford Street) were specially erected for the process of lard refining, and are equipped with the most up-to-date appliances for this business, capable of a weekly output of 100 tons. They are fitted throughout with electric lights, motors, &c., and among other advantages there are cold storage chambers in which all refined lard is warehoused. The refinery is within easy access of the docks, there being a continuous line of railway up to the works, running into a large covered shed at the back of the premises, so that goods can be both despatched from and received at the works in trucks, all loading and discharging being done under cover.

Flannel Factory, Littleborough.

THE manufacture of flannel in Lancashire dates back to the reign of Edward III., when certain Flemish weavers, exiled by troubles at home, settled down in the wild and lofty moorland between Lancashire and Yorkshire. From them in part were descended the famous handloom flannel weavers of Rochdale who began the co-operative movement.

In 1872 co-operators in the neighbourhood formed the Lancashire and Yorkshire Productive Society, and began to make flannel at Hare Hill Mill. The venture, however, was not a success, and in 1878 it went into voluntary liquidation. In 1898 the business was purchased by the C.W.S., and has since taken its place as a profit-earning department.



Littleborough Flannel Factory.



Manchester Tobacco Factory.

Tobacco Factory, Manchester.

FOR many years the demand for tobacco had been steadily growing, and about 1896 the Directors of the C.W.S. felt that the time was opportune for embarking on the manufacture of the fragrant weed. A factory was bought in Sharp Street, a few minutes' walk from Balloon Street, and a start was made in 1898. Instant success attended the enterprise, and within four years a trade of £300,000 per annum was reached. Alterations and additions proceeded rapidly, until the buildings now cover the ground to the extent shown in the illustration, the total floor space being well over 10,000 square yards. As an indication of the strenuous efforts made to meet the varied tastes of the consumers, it may be mentioned that the factory turns out 480 separate kinds of roll, flake, mixture, shag, honeydew, cigars, and cigarettes. The annual production amounts to 1,500 tons tobacco, 4,440,000 cigars, and 53,000,000 cigarettes.

Hosiery Factory, Huthwaite.

THE connection of the C.W.S. with hosiery began in 1903, when the Leicester Hosiery Factory, which had previously been run as a copartnership works, was taken over as a going concern. For about five years operations were carried on in the old building, but in 1908 the business was transferred to a new and commodious factory designed and erected by the C.W.S. at Hucknall Huthwaite, fourteen miles from Nottingham.

The building, which lies just behind the main road from Sutton to Huthwaite, is of two storeys without a basement. It takes the shape of an L, with the engine-house and other incidental buildings grouped in an angle. From one extreme of the L to the other it is one lofty hall, lit from roof and sides.

The factory produces all kinds of hosiery, such as stockings suitable for all varieties of extremities; socks also, and underclothing, cardigans, &c.

All that modern machinery can do, guided by expert management, is brought to bear upon the work, with the result that the C.W.S. hosiery is second to none.



Hucknall Huthwaite Hosiery Factory.



Bury Weaving Shed.

Bury Weaving Shed.

THIS factory, opened in February, 1905, is situated at Springs, Bury, about ten miles from Manchester, and, being directly connected with the Lancashire and Yorkshire Railway, is conveniently placed with regard to traffic facilities. As may be seen from the illustration, ample provision is made for a full volume of light, and the floor space gives ample room for each branch of the work. There are about 900 looms at work making domestics, Wigans, sheetings, &c. The material woven here is dyed and finished elsewhere, these operations being distinct and separate trades. The bulk of it reappears as lining or pocketing, the "Sataline" fabric being in considerable favour amongst the Societies.

Radcliffe Weaving Shed.

THIS is the latest C.W.S. development on the productive side. The site for the shed has been admirably chosen just on the borders between Radcliffe and Bury (Lancashire). Only coloured goods are woven, principally shirtings, and the other mills required for the various finishing processes are close at hand. The building is worthy of the C.W.S. Distinctive features are individual electric drive for each loom and machine, the current being supplied by the Bury Corporation. There are no humidifiers, so the health of the employés stands to gain. All "conditioning," therefore, is done to the yarn, and for this purpose there is a good cellar. Automatic looms are being used, which mean better and more reliable cloth. The productions have given every satisfaction, and with the foundations of success so securely laid, firm hopes for the future may be entertained.



Radcliffe Weaving Shed.



Keighley Ironworks.

Keighley Ironworks.

THE inception of these works was due to the local co-operators, who in 1885 had under consideration a proposition to enter into a local industry. Eventually a Society was formed and registered, premises taken, and work commenced.

In 1907 negotiations were promoted with a view to the acquirement of the Society by the C.W.S., and in 1908 the transfer was an accomplished fact.

In 1909 the foundry was extended and more commodious buildings erected for the machine department, and altogether the buildings are very substantial and well adapted to the demands of the work. The works are thoroughly equipped with machinery for economical production, and for both driving and lighting electricity is the motive power.

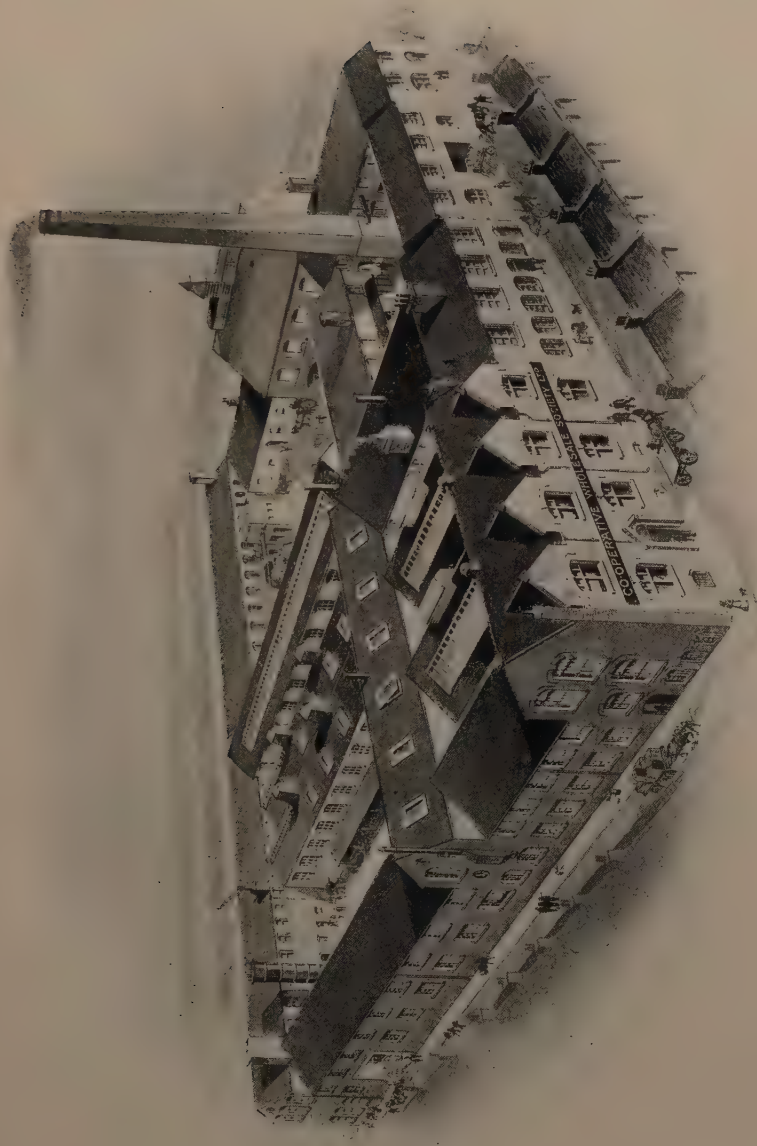
As regards conditions of labour and wages paid, there is no hesitation in declaring them to be in harmony with the aims and desires of co-operators.

The principal articles of manufacture are washing machines and wringers, bedsteads of iron and brass, and wire mattresses.

Dudley Bucket and Fender Works.

THESE works were established in 1888 as an independent Productive Society, and after twenty years of steady progress the works were taken over by the C.W.S. at the same time as the Keighley Ironworks.

The main products of the factory are fenders, fire-irons (curb, brass, and antique), and fire brasses. These are of a great variety in design, as new patterns are constantly in demand. Iron, steel, brass, and copper are all brought into requisition, singly or in combination, to produce attractive articles of furniture. The less ornamental but often more useful bucket is also made in large quantities and many sizes. Galvanised goods, such as buckets, baths, waterloos, &c., also constitute a large proportion of the trade.



Dudley Bucket and Fender Works.



Birtley Tinplate Works.

Birtley Tinplate Works.

THESE are the largest works of the kind in the North of England devoted to the production of tinware, steel, and sheet metal goods of every description.

The works are situated in the south-west of Birtley, adjoining the main line of the North-Eastern Railway, six miles south of Newcastle-on-Tyne.

The building is a brick structure, composed of single and two-storey buildings, and, with the various outbuildings, covers close on an acre of land.

The machine and general workshop is fitted up with modern machinery, with power presses for all classes of work, and automatic machinery for the production of sheet metal goods. Domestic tinware is here made in large quantities and of great variety, over 500 various articles being made in this department.

Special flour bins and shoots are made for the storage of all kinds of flour, meal, and grain. In this department are also manufactured the noted steel panel trunks. There are also manufactured ventilators, flour mill spouts and hoppers, &c., to suit the requirements of the various productive departments.

All the machinery is worked by electric motors, and the conditions of labour are all that could be desired.

Paint, Colour, and Varnish Works, Rochdale.

THESE premises were opened in November, 1911, and are completely equipped for the manufacture of paints, colours, varnishes, distempers, enamels, &c. A large and increasing trade is being done, and the productions are giving every satisfaction.

A speciality is made of high-class paints, colours, and varnish for building and painting departments.



Paint, Colour, and Varnish Works, Rochdale.



S.S. "Fraternity."

Steamships Department.

THE Garston and Rouen service was started by the Society with a fortnightly steamer in the early part of 1879, and in 1894, on the opening of the Manchester Ship Canal, a separate fortnightly service was commenced between Manchester and Rouen, the s.s. "Pioneer" being the first boat to land inward foreign cargo direct on to the Manchester Quay.

In 1905 the service was rendered more efficient by making it weekly from each port, instead of fortnightly.

The boats call at Swansea on the outward voyage to load tinplates and other general goods.

The sailing days are from Manchester every Tuesday; from Garston, Wednesday; and from Swansea, Friday, arriving at Rouen Sunday. The homeward sailings are from Rouen every Wednesday, arriving at Manchester on Sunday. Two steamers are at present engaged in the service, viz., the s.s. "Fraternity" and "New Pioneer."

S.S. "FRATERNITY."

The "Fraternity" was built at Glasgow in 1903. Dimensions, 180ft. 2in. × 28ft. 1in. × 15ft. 6in.; net tonnage, 281. She carries 650 tons cargo and 100 tons bunkers. The crew consists of 15 hands; master, Captain R. Bell.

S.S. "New Pioneer."

THE "New Pioneer" was built at Walker-on-Tyne, December, 1905, to replace the original "Pioneer," sold in 1906. Dimensions, 193ft. $\times$ 29ft. 6in. $\times$ 12ft. 4in.; net tonnage, 320. She carries 750 tons cargo and 100 tons bunkers. The crew consists of 15 hands; master, Captain J. T. Gemmell.



S.S. "New Pioneer."



Roden Convalescent Home.

Roden Convalescent Home.

THE Roden Estate, purchased by the C.W.S. in 1896, included the Roden Hall, a small modern country house standing in its own grounds. After alterations and enlargements the house was opened in July, 1901, as a Convalescent Home. It has accommodation for fifty persons. The house includes a men's sitting-room, a billiard-room, a library, a handsome dining-room, which is used also for concerts and dances, a ladies' sitting-room, a conservatory, separate bedrooms, and also bedrooms for married couples as well as the matron's apartments, kitchens, &c. The Home has its own kitchen garden and tennis courts. A bowling green and cricket ground adjacent is used jointly by visitors and the employés of the estate. The Home is open, first, for convalescents, who, being recommended by a Co-operative Society federated with the C.W.S., and not suffering from infectious disease, are received at a charge of 12s. 6d. per week. When there is room visitors are also received at 25s. per week, or for a week-end for 12s. The official receiving day for convalescents is Tuesday, when a physician attends at the Home.

Roden Estate.

THE C.W.S. Roden Estate, in Shropshire, consists of 742 acres on the banks of the little river Roden, and is situated six miles north-east of Shrewsbury. Of this land 208 acres are farmed by the C.W.S., the remainder being mainly let to farmers. Fifty acres are (summer, 1914) under fruit, seventy acres are mowing and grazing land, and the rest is planted with peas, roots, and cereals. Besides the fruit farm there are the glasshouses, the total length of which amounts to over a mile and a half. Tomatoes, cucumbers, and grapes are chiefly grown. Thirty-four men are employed on the farm, and thirty-two men and five women in the glasshouses; while in the fruit-picking season a large temporary staff is recruited from the Wellington and Oakengates districts. The fruit picked is taken daily four miles to Crudgington Station, on the Wellington and Market Drayton line, by steam lurry. The lurry does the work of seven horses, and there are fourteen horses kept on the farm. Modern cottages have been built for employés, fitted with electric light, and are let at a rent of 3s. weekly. An institute, with lending library and reading and billiard rooms, has also been provided by the C.W.S., and in this building religious services are held every Sunday. The estate has its own water supply by means of a pumping station, and its own plant for electric lighting; also an organised fire brigade. The estate was acquired in 1896.



Roden Tomato Houses.



Wisbech Fruit Depot: South Brink.

Wisbech Fruit Depot.

THE Wisbech Fruit Depôt is an unpretentious building, but forms an important link between the agricultural industry of the Eastern Counties and the C.W.S., acting as a collecting and distributing station for fruit and vegetables grown so abundantly in this locality. The Depôt was first started in connection with the purchase of potatoes, in which a large business is done, while vegetables for pickling are despatched to Middleton, Silvertown, and Pelaw factories. In the winter months employment is given to some seventy women at pea picking in connection with the dried-pea trade. During the summer, daily consignments of fruit are received from the fruit growers in the neighbourhood, the bulk of this being immediately despatched to the Middleton Preserve Works for jam. An increasing trade with the C.W.S. is that of canned fruits, and in order to preserve the strawberries, raspberries, &c., while absolutely fresh, the fruit is heated in retorts and canned the same day that it arrives from the farmers, and is afterwards sent by rail to Middleton, where it is labelled and distributed. Green fruit is also collected and despatched to the various warehouses of the C.W.S., and also to the Scottish Wholesale Society.

The building is 133 feet long by 30 feet wide, but the site provides ample room for extension as the business develops. The Depôt is well situated for the ready despatch of produce, the railway siding in connection with the Great Eastern Railway giving convenient access to all the distributive centres and productive works.

Coldham Estate, near Wisbech.

HERE the C.W.S. has an estate in one of the best farming districts of the country. The acreage is about 802, and consists in the main of four farms—Percival House, Fen, Lilypool, and Jew House. The first and chief of these adjoins the Coldham railway station, the farmhouse being but a couple of minutes distant. The other lands also adjoin side by side at different points. Peas, potatoes, and fruit will be the main supplies from the land. The co-operative store movement, as brought into touch with the land through the C.W.S. salerooms and factories, can absorb huge quantities of all kinds of produce, and the only problem is to grow it in sufficient quantities at any two or three places to make the handling economical and the business worth while.



Coldham Estate, near Wisbech : Views of the Farms.



Marden Estate and Views of the Fruit Farm.

Marden Estate.

THE Marden Fruit Farm, which lies about five miles from the city of Hereford, was purchased by the C.W.S. in 1904 as an extension of the "back-to-the-land" policy initiated at Roden. The county of Hereford is famous for its orchards, the rich soil being eminently suited for fruit growing. The Marden Estate has nearly 120 acres devoted to fruit culture, of which plums, apples, strawberries, gooseberries, and black currants are chiefly in favour.

Whilst tomato growing is on a smaller scale than at Roden, there is a goodly extent of glasshouses at Marden, where this popular fruit-vegetable is reared, and, in spite of every effort to keep pace, the demand from retail Societies exceeds the supply. The co-operative taste has learned to distinguish the superior excellence of "our own grown" tomatoes.

A sure market for fruit is not only found in the same direction, but the requirements of Middleton Jam Works are in themselves enormous.

Withgill Farm and Chaigeley Estate.

WITHGILL FARM.

THIS farm, situate in the parish of Mytton, is three miles from the town of Clitheroe, and comprises an area of 293 acres, 1 rood, 17 perches of freehold land. It was purchased for the purposes of a dairy farm, cattle grazing, and pig feeding and rearing. The farm buildings have been modernised and brought thoroughly up to date as regards sanitation, &c., whilst the piggeries now nearing completion will, when finished, accommodate about 1,800 pigs.

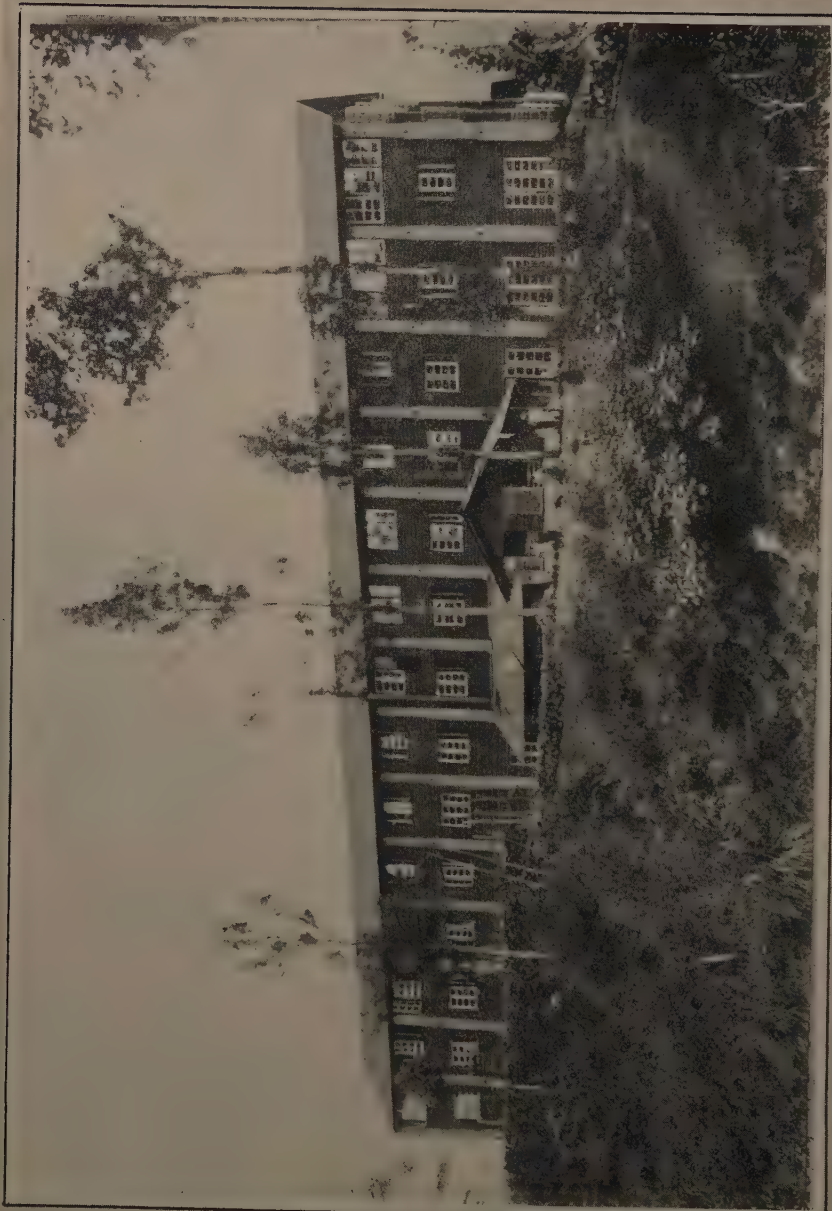
CHAIGELEY ESTATE.

The estate, which practically adjoins Withgill, contains an area of 477 acres, 16 perches of freehold land, and comprises eight farms, three cottages, and a large manor house, the latter at the present time (November) being occupied, on the recommendation of the delegates assembled at the September, 1914, quarterly meeting, by some fifty-seven Belgian refugees. Auxiliary piggeries to Withgill are also being erected on one of the small farms to accommodate 200 pigs.

It is not the intention of the C.W.S. to dispossess the present tenants, but to take over the farms as and when they become vacant.



Chaigeley Manor and Views of the Estate.



Mahavilla Tea Factory.

Tea Estates, Ceylon.

IT was in 1882 the English and Scottish Wholesale Societies combined to establish a joint Tea Department in London, adjacent to the dock warehouses and brokers' offices that constitute the great tea market of the country. At the same time tea planting was beginning in the central mountainous districts of Ceylon. The superbly beautiful, winterless island, with its warm steamy atmosphere in the mountain regions round Kandy, is now one of the chief sources of supply, and when the Wholesale Societies decided to follow the trade outside the bounds of this country, and to become tea planters themselves, it was to Ceylon they went. In 1902 the Nugawella and Weliganga estates were bought, and to these properties the Mahavilla, Dambagalla, Denmark, Westhall, Lower Barcaple, and Nagastenne estates have since been added. Altogether, through their Wholesales, English and Scottish Co-operators own 3,386 acres of Cingalese ground.



Mahavilla Bungalow.



Weliganga Tea Estate.

The Co-operative Wholesale Society Limited.

ENROLLED AUGUST 11th, 1863,
under the provisions of the Industrial and Provident Societies
Act, 25 and 26 Vict., cap. 87, sec. 15, 1862.

BUSINESS COMMENCED MARCH 14th, 1864.

SHARES, £5 EACH, TRANSFERABLE.

Wholesale General Dealers, Manufacturers, Bankers, Insurers,
Millers, Printers, Bookbinders, Boxmakers, Lithographers,
Architects, Engineers, Builders, Shipowners, Butter Factors,
Lard Refiners, Bacon Curers, Fruit Growers, Drysalters, Spice
Grinders, Saddlers, Curriers, Iron Founders and Tinplate
Workers, Tea Growers, Blenders, Packers, Farmers, and
Importers, Fellmongers, Dealers in Grocery and Provisions,
Drapery, Woollens, Ready-made Clothing, Boots and
Shoes, Brushes, Crockery, Carpets, Furniture, Coal, Hides,
Skins, Bones, &c., &c.

Manufacturers of Flour, Butter, Biscuits, Sweets, Preserves,
Pickles, Vinegar, Candied Peels, Cocoa, Chocolate, Tobacco,
Cigars, Cigarettes, Snuff, Soap, Candles, Glycerine, Starch,
Blue, Paints, Varnish, and Colours, Boots and Shoes,
Saddlery, Woollens, Clothing, Flannels, Shirts, Mantles,
Underclothing, Overalls, Umbrellas, Leather Bags, Corsets,
Millinery, Hosiery, Silesias, Shirts, Coloured Cotton
Goods, Pants, Ladies' Underwear, Cardigans, Furniture,
Brushes, General Hardware, Bedsteads, Wire Mattresses,
Mats, Fats, &c.

CENTRAL OFFICES,
BANK, SHIPPING, AND COAL DEPARTMENT, GROCERY AND PROVISION AND
BOOT AND SHOE WAREHOUSES:

Balloon Street, Manchester.

BRANCHES:

West Blandford Street, Newcastle-on-Tyne,
AND
Leman Street, London, E.

INSURANCE.

JOINT INSURANCE DEPARTMENT (C.W.S. & S.C.W.S.):

Corporation Street, Manchester.

GROCERY SALEROOM, FURNISHING AND STATIONERY
WAREHOUSES:

Corporation Street, Manchester.

DRAPERY WAREHOUSES:

Balloon Street and Dantzic Street,
Manchester.

WOOLLEN CLOTH AND READY-MADES WAREHOUSE:

Dantzic Street, Manchester.

SADDLERY AND UMBRELLA REPAIRING DEPARTMENTS:

Thorniley Brow, Manchester.

HIDE AND SKIN WAREHOUSES:

Elm Street, Manchester; Copley Hill, Leeds;
Beeston, Nottingham; Rotherham,
Newcastle-on-Tyne, and Stockton-on-Tees.

FELLMONGERING AND FAT AND BONES DEPARTMENTS:

Pontefract.

SALEROOMS:

LEEDS, HUDDERSFIELD, NOTTINGHAM, BLACKBURN,
AND BIRMINGHAM.

PURCHASING AND FORWARDING DEPÔTS.

England:

LIVERPOOL, MANCHESTER, BRISTOL, LONGTON, GOOLE, GARSTON
CARDIFF, AND NORTHAMPTON.

Ireland:

CORK, LIMERICK, TRALEE, AND ARMAGH.

IRISH CREAMERIES:

BUNKAY BRIDGE, KILCOMMON, TRALEE.

And 6 Auxiliaries.

FOREIGN AND COLONIAL.

America:

NEW YORK.

Canada:

MONTREAL.

France:

ROUEN.

Spain:

DENIA.

Denmark:

COPENHAGEN, AARHUS, ODENSE, ESBJERG, AND HERNING.

Sweden:

GOTHENBURG.

Ceylon:

COLOMBO.

West Africa:

MAKENE, FREETOWN, AND ACCRA.

Southern India:

WYNAAD.

PRODUCTIVE WORKS AND DEPARTMENTS.

Biscuits, Cakes, Table Jellies, and Sweets Works:
CRUMPSALL, NEAR MANCHESTER.

Boot and Shoe Works:
LEICESTER, HECKMONDWIKE, RUSHDEN, AND LEEDS.

Soap, Candle, Clycerine, Lard, Starch, and Blue Works:
IRLAM, NEAR MANCHESTER,
SILVERTOWN (LONDON), AND DUNSTON-ON-TYNE.

Tallow Works:
SYDNEY (AUSTRALIA).

Woollen Cloth Works:
LIVINGSTONE MILL, BATLEY.

Clothing Factories:
HOLBECK (LEEDS), BROUGHTON (MANCHESTER),
LONDON, AND PELAW-ON-TYNE.

Cocoa and Chocolate Works:
DALLOW ROAD, LUTON.

Flour Mills:
DUNSTON-ON-TYNE, SILVERTOWN (LONDON), OLDHAM,
MANCHESTER, AND AVONMOUTH (BRISTOL).

Furniture, Bedding, and Cartwrighting Factories:
BROUGHTON (MANCHESTER) AND PELAW-ON-TYNE.

Printing, Bookbinding, Boxmaking, and
Lithographic Works:
LONGSIGHT (MANCHESTER), PELAW-ON-TYNE, AND LEICESTER.

Preserve, Candied Peel, and Pickle Works,
also Vinegar Brewery:
MIDDLETON JUNCTION, NEAR MANCHESTER.

Preserve, &c., Works:
READING.

Shirts, Mantles, and Underclothing, Building and Traffic:
BROUGHTON (MANCHESTER).

Umbrella Making and Repairing: Men's Overalls and Shirts:
MANCHESTER. SHEFFIELD.

PRODUCTIVE WORKS AND DEPARTMENTS—*continued.*

Tailoring, Shirts, Kerseys, Drugs, &c.:

PELAW-ON-TYNE.

Leather Bag Making:

NEWCASTLE-ON-TYNE.

Tailoring and Bedding:

LONDON.

Bacon Factories:

TRALEE (IRELAND) AND HERNING (DENMARK).

Lard Refineries:

WEST HARTLEPOOL AND IRLAM.

Tobacco, Cigar, Cigarette, and Snuff Factory:

SHARP STREET, MANCHESTER.

Flannel and Blanket Factories:

HARE HILL MILLS, LITTLEBORO'.

Corset Factories:

DESBOROUGH AND KETTERING.

Hosiery, &c., Factory:

HUTHWAITE, NOTTS.

Tea Gardens:

CEYLON AND SOUTHERN INDIA. .

Weaving Sheds:

BURY AND RADCLIFFE.

Brush and Mat Works:

HUNSLET, LEEDS.

Fruit, &c., Farms:

RODEN (SHROPSHIRE), MARDEN (HEREFORD), WISBECH (CAMBS.),
AND WITHGILL (LANCS.).

General Hardware, Bedstead, Wire Mattress, and

Tinplate Works:

DUDLEY, BIRTLEY, AND KEIGHLEY.

Butter Factory:

BRISLINGTON, BRISTOL.

Paint, Varnish, and Colour Works:

ROCHDALE.

Scales Departments:

MANCHESTER, NEWCASTLE, LONDON, BRISTOL, BIRMINGHAM,
LIVERPOOL, LEICESTER, NOTTINGHAM, AND LEEDS.

Engineering and Power Station:

TRAFFORD PARK, MANCHESTER.

SHIPOWNERS AND SHIPPERS

BETWEEN

GARSTON AND ROUEN; MANCHESTER AND ROUEN.

STEAMSHIPS OWNED BY THE SOCIETY:

"FRATERNITY," "NEW PIONEER," "DINAH,"
AND "BRITON."

BANKING DEPARTMENT.

Agencies:

- THE LONDON COUNTY AND WESTMINSTER BANK LIMITED,
LONDON, AND BRANCHES.
- THE MANCHESTER AND COUNTY BANK LIMITED, CORN
EXCHANGE, MANCHESTER, AND BRANCHES.
- THE NATIONAL PROVINCIAL BANK OF ENGLAND LIMITED,
MANCHESTER, AND BRANCHES.
- THE MANCHESTER AND LIVERPOOL DISTRICT BANK LIMITED,
WITHY GROVE, MANCHESTER, AND BRANCHES.
- THE LANCASHIRE AND YORKSHIRE BANK LIMITED,
MANCHESTER, AND BRANCHES.
- THE UNION BANK OF MANCHESTER LIMITED, MANCHESTER,
AND BRANCHES.
- THE LONDON CITY AND MIDLAND BANK LIMITED, CORNHILL,
LONDON, AND BRANCHES.
- WILLIAMS DEACON'S BANK LIMITED, MANCHESTER, AND
BRANCHES.
- BARCLAY AND CO. LIMITED, LONDON, AND BRANCHES.
- LLOYD'S BANK LIMITED, GREY STREET, NEWCASTLE-ON-TYNE,
AND BRANCHES.
- UNITED COUNTIES BANK LIMITED, BARNSLEY, AND BRANCHES.
- LONDON JOINT STOCK BANK LIMITED (LATE YORK CITY AND COUNTY
BANK LIMITED), YORK, AND BRANCHES.
- UNION OF LONDON AND SMITH'S BANK LIMITED, BARNSLEY,
AND BRANCHES.
- CAPITAL AND COUNTIES BANK LIMITED, LONDON,
AND BRANCHES.
- PARRS BANK LIMITED, MANCHESTER, AND BRANCHES.
- NORTHAMPTONSHIRE UNION BANK LIMITED, RUSHDEN,
AND BRANCHES.
- WEST YORKSHIRE BANK LIMITED, HALIFAX, AND BRANCHES.
- LONDON AND SOUTH-WESTERN BANK LIMITED AND BRANCHES.

THE COMMITTEE :

ADAMS, Mr. THOMAS, 12, Park View, Stockton-on-Tees.
ALLEN, Mr. THOMAS W., Edward VII. Avenue, Newport, Mon.
COLEY, Mr. PHILIP, 22, Stansfield Street, Sunderland.
DEANS, Mr. ADAM, "The Limes," Belle Grove, Welling, Kent.
DUDLEY, Mr. WILLIAM E., Highlands Road, Runcorn.
ELSEY, Mr. HENRY, "Bickleigh," Festing Grove, Festing Road, Southsea.
ENGLISH, Mr. JOSEPH, "Tyneholme," Birtley, R.S.O., Co. Durham.
GRAHAM, Mr. EDWARD J., 65, Crown Street, Newcastle-on-Tyne.
GRAHAM, Mr. WILLIAM D., 123, Bede Burn Road, Jarrow-on-Tyne.
GRINDROD, Mr. EMMANUEL, 15, Holker Street, Keighley.
HAYHURST, Mr. GEORGE, "Hameldon," Manchester Road, Accrington.
HEMINGWAY, Mr. WASHINGTON, 108, Bolton Road, Pendleton,
Manchester.
HENSON, Mr. THOMAS J., "Burrington," 11, Weatheroak Road, Sparkhill,
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HOLT, Mr. ROBERT, "Brier Crest," Deeplish Road, Rochdale.
JOHNS, Mr. JOHN E., "Glen Aber," 3, Brunswick Hill, Reading.
KILLON, Mr. THOMAS, 7, Tenterden Street, Bury.
KING, Mr. JOHN W., 15, Petteril Street, Carlisle.
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MARSHALL, Mr. CHARLES, 33, Wentworth Road, York.
McINNES, Mr. DUNCAN, Hamilton Road, Lincoln.
MOORHOUSE, Mr. THOMAS E., *Reporter* Office, Delph.
MORT, Mr. ISAAC, 233, High Road, Leyton, Essex.
PARKES, Mr. MILES, 16, Heathfield Avenue, Crewe.
PINGSTONE, Mr. HENRY C., "Yew Bank," Brook Road, Heaton Chapel,
Manchester.
SHILLITO, Mr. JOHN (*President*), 4, Park View, Hopwood Lane, Halifax.
SHOTTON, Mr. THOMAS E., 28, Grosvenor Drive, Whitley Bay.
THORPE, Mr. GEORGE, 6, Northfield, Highroyd, Dewsbury.
THREADGILL, Mr. ARTHUR E., 4, Sherfield Road, Grays, Essex.
TWEDDELL, Mr. THOMAS (*Vice-President*), "Lydenhurst," Hutton Avenue,
West Hartlepool.
WILKINS, Mr. HENRY J. A., 35, Hamilton Gardens, Mutley, Plymouth.
WOODHOUSE, Mr. GEORGE, "The Laurels," 27, Renals Street, Derby.
YOUNGS, Mr. HENRY J., 6, Portland Place, Old Palace Road, Norwich.

SCRUTINEERS :

Mr. J. J. BARSTOW, Dewsbury.
Mr. E. PROCTER (Moorside), Swinton.

AUDITORS :

Mr. THOS. J. BAYLIS, Masborough.	Mr. C. J. BECKETT, Darwen.
Mr. THOMAS WOOD, Manchester.	Mr. B. TETLOW, Newcastle-on-Tyne.
Mr. JOHN SMITH, Middlesbrough.	

OFFICERS OF THE SOCIETY.

Secretary and Accountant:
Mr. T. BRODRICK.

Bank Manager and Cashier:
Mr. T. GOODWIN.

Joint Insurance (late C.I.S.):
Mr. J. ODGERS.

BUYERS, SALESMEN, &c.

Manchester—Grocery and Provisions:

Mr. J. MASTIN.
Mr. A. W. LOBB.

Mr. L. WILSON.
Mr. J. HOLDEN.

Mr. R. TURNER.

Manchester—Paper, Twine, &c.
Mr. H. WIGGINS.

Manchester—Drapery:

Mr. J. C. FODEN.
Mr. G. TOMLINSON.
Mr. J. BLOMELEY.
Mr. J. BOWDEN.
Mr. E. LEES.
Mr. E. C. REVETT.
Mr. J. D. BALL.
Mr. W. SWINDALE.

Mr. J. EDE.
Mr. H. MOORES.
Mr. R. H. FOGG.
Mr. J. LOGAN.
Mr. J. E. KNIGHT.
Mr. F. LOCKWOOD.
Mr. S. BOLTON.

Manchester—Woollens, Boots, and Furniture:

Woollens, Ready-mades, and Outfitting	Mr. W. GIBSON.
Woollens	Mr. G. WOODALL.
Men's and Youths' Ready-mades	Mr. W. BOOTH.
Juvenile Clothing	Mr. R. C. PEARSON.
Gent's Outfitting	Mr. T. LEWTY.
Gent's Bespoke Tailoring	Mr. J. A. HOLLAND.
Boots and Shoes and Saddlery	Mr. H. JACKSON.
General Furnishing	Mr. T. R. ALLEN.
Furniture and Hardware	Mr. F. E. HOWARTH.

Shipping Department:
Mr. A. E. MENZIES.

Export Department:
Mr. C. BOOTH.

Coal Department:
Mr. S. ALLEN.

Manchester, Leeds, Newcastle, Stockton, Beeston, and Rotherham
Hides and Skins

Mr. G. TURNER.

Pontefract:

Fellmongering

Mr. G. TURNER.

Fat and Bones

Mr. P. S. WILSON.

Shipping and Forwarding Depots:

Rouen (France)

Mr. J. MARQUIS.

Goole

Mr. E. W. RAPER.

BUYERS, SALESMEN, &c.—*continued.*

London :

Tea and Coffee Mr. W. B. PRICE.

Luton :

Cocoa and Chocolate Mr. E. J. STAFFORD.

Liverpool :

Grocery and Provisions Mr. W. L. KEWLEY.

Salerooms :

Leeds Mr. W. POLLARD.
 Nottingham Mr. A. DELVES.
 Huddersfield Mr. J. O'BRIEN.
 Birmingham Mr. J. BARLOW.
 Blackburn Mr. H. SHELMERDINE.

Longton :

Crockery Dépôt Mr. J. RHODES.

Birmingham :

Cycle Dépôt Mr. H. H. BAILEY.

Newcastle :

Chief Clerk..... Mr. H. R. BAILEY.
 Grocery and Provisions Mr. R. WILKINSON.
 " " Mr. T. WEATHERSON.
 Greengrocery Mr. J. ATKINSON.
 Drugs, Drysaltery, &c..... Mr. R. A. WALLIS.
 Paper, Twine, &c..... Mr. H. GLENNY.
 Dress Mr. J. LEE.
 Manchester and Greys..... Mr. W. STODDART.
 Hosiery, Haberdashery, Mercery, Millinery, Fancy, }
 and Mantles } Mr. T. TOWNS.
 Woollens and Ready-mades Mr. J. THOMPSON.
 Boots and Shoes Mr. O. JACKSON.
 Furniture, Carpets, and Hardware Mr. J. W. TAYLOR.
 Jewellery, Fancy Goods, and Saddlery Mr. H. H. BAILEY.
 Coal..... Mr. E. NELSON.
 Cattle Mr. E. JONES.

London :

Chief Clerk..... Mr. W. E. S. COCK.
 Grocery and Provisions Mr. W. OPENSHAW.
 Manchester, Greys, Mercery, Haberdashery, and Hosiery Mr. F. G. WADDINGTON.
 Millinery, Dress, Fancy, and Mantles Mr. J. W. FORSTER.
 Woollens and Ready-mades Mr. G. HAY.
 Boots and Shoes Mr. A. PARTRIDGE.
 Furnishing..... Mr. F. LING.
 Coal..... Mr. J. BURGESS.

BUYERS, SALESMEN, &c.—*continued.*

Bristol Depot:

Chief Clerk.....	Mr. J. WHITE.
Grocery and Provisions	Mr. J. W. JUSTHAM.
Fancy Drapery	Mr. E. H. FLUDE.
Heavy Drapery	Mr. W. F. JAMES.
Woollens and Ready-mades	Mr. G. H. BARNES.
Boots and Shoes	Mr. W. WALFORD.
Furnishing.....	Mr. C. HOULGATE.
Brislington Factory	Mr. O. THOMAS.

Cardiff Depot:

Grocery and Provisions	Mr. J. F. JAMES.
Fancy Drapery	Mr. E. H. FLUDE.
Heavy Drapery.....	Mr. W. F. JAMES.

Northampton Depot:

Grocery and Provisions	Mr. A. BAKER.
Drapery	Mr. G. PEARSON.

IRISH DEPÔTS:

BUTTER AND EGGS, ALSO BACON FACTORY.

Limerick:

Mr. P. HURLEY.

Tralee:

Mr. J. J. McCARTHY.

Cork:

Mr. J. TURNBULL.

Armagh:

Mr. P. O'NEILL.

Tralee Bacon Factory:

Mr. J. ROBINSON.

COLONIAL AND FOREIGN DEPÔTS:

New York (America):

Mr. J. GLEDHILL.

Copenhagen (Denmark):

Mr. W. DILWORTH, JUNR.

Aarhus (Denmark):

Mr. H. J. W. MADSEN.

Gothenburg (Sweden):

Mr. W. JOHNSON.

Montreal (Canada):

Mr. A. C. WIELAND.

Odense (Denmark):

Mr. C. W. KIRCHHOFF.

Esbjerg (Denmark):

Mr. H. C. KONGSTAD.

Herning (Denmark):

Mr. A. MADSEN.

Denia (Spain):

Mr. W. J. PIPER.

Ceylon:

Colombo (Joint C.W.S. and S.C.W.S.),
Mr. G. PRICE.

Southern India:

Wynaad, near Madras (Joint C.W.S.
and S.C.W.S.), Mr. G. BENZIE.

West Africa:

Makene, Mr. A. R. RICHARDS.

Freetown, Mr. J. R. COCKSEY.

Accra (Joint C.W.S. and S.C.W.S.),
Mr. H. A. PEARCE.

MANAGERS, PRODUCTIVE, &c., WORKS.

ARCHITECT	Mr. F. E. L. HARRIS, A.R.I.B.A.
AVONMOUTH FLOUR MILL	Mr. A. H. HOBLEY.
BATLEY WOOLLEN CLOTH WORKS.....	Mr. S. BOOTHROYD.
BIRTLEY TINPLATE WORKS.....	Mr. A. THORP.
BROUGHTON CABINET FACTORY	Mr. F. E. HOWARTH.
BROUGHTON CLOTHING FACTORY	Mr. A. GRIERSON.
BROUGHTON MANTLE FACTORY	Mr. J. G. HARRISON.
BROUGHTON SHIRT FACTORY	Mr. J. EDE.
BROUGHTON UNDERCLOTHING FACTORY	Mr. R. KERSHAW.
BUILDING DEPARTMENT	Mr. H. TOWNLEY.
BURY WEAVING SHED	Mr. H. BLACKBURN.
CRUMPSALL BISCUIT, &c., WORKS.....	Mr. G. BRILL.
DESBOROUGH CORSET FACTORY.....	Mr. P. THOMAS.
DUDLEY GENERAL HARDWARE WORKS	Mr. J. ROUND.
DUNSTON FLOUR MILL	Mr. T. PARKINSON.
DUNSTON SOAP WORKS	Mr. R. BRODRICK.
ENGINEER	} Mr. R. L. GASS.
ENGINEERING AND POWER STATION, TRAFFORD PARK.	
HECKMONDWIKE BOOT AND SHOE WORKS	Mr. J. HAIGH.
HUTHWAITE HOSIERY FACTORY.....	Mr. H. FRANCE.
IRLAM SOAP, CANDLE, GLYCERINE, LARD, & STARCH WKS.	Mr. J. E. GREEN.
KEIGHLEY IRONWORKS.....	Mr. H. WHALLEY.
LEEDS BRUSH AND MAT FACTORY	Mr. A. W. SAUNDERS.
LEEDS CLOTHING FACTORY.....	Mr. T. UTTLEY.
LEEDS BOOT FACTORY	Mr. J. HAIGH.
LEICESTER BOOT AND SHOE WORKS	Mr. T. E. HUBBARD.
LEICESTER PRINTING AND BOXMAKING WORKS	Mr. G. SPEAK.
LITTLEBORO' FLANNEL FACTORY	Mr. W. H. GREENWOOD.
LONDON CLOTHING FACTORY	Mr. G. BRYANT.
MANCHESTER PRINTING, BOOKBINDING, BOXMAKING, AND LITHOGRAPHIC WORKS	} Mr. G. BREARLEY.
MANCHESTER TOBACCO, CIGAR, CIGARETTE, AND SNUFF FACTORY	
MANCHESTER (TRAFFORD PARK) PROVENDER MILL..	Mr. W. H. SLAWSON.
MANCHESTER (TRAFFORD PARK) SUN FLOUR MILL..	} Mr. W. MATTHEWS.
OLDHAM STAR FLOUR MILL	
MIDDLETON JUNCTION PRESERVE AND CANDIED PEEL WORKS, ALSO PICKLE WORKS AND VINEGAR BREWERY	Mr. W. J. HOWARD.
PELAW DRUG AND SUNDRIES WORKS	Mr. R. A. WALLIS.
PELAW CABINET AND CARTWRIGHTING WORKS	Mr. W. KERSHAW.
PELAW ENGINEERING WORKS	Mr. W. FLETCHER.
PELAW PRINTING WORKS.....	Mr. C. GILHESPIE.
PELAW TAILORING FACTORY	Mr. J. THOMPSON.
PELAW KERSEY AND SHIRT FACTORY	Mr. T. TOWNS.
RADCLIFFE WEAVING SHED	Mr. J. T. ROSTERN.
READING PRESERVE WORKS	Mr. S. M. WEBSTER.
ROCHDALE PAINT, VARNISH, AND COLOUR WORKS ..	Mr. P. KNOWLES.
RUSHDEN BOOT AND SHOE WORKS	Mr. L. TYSOE.
SCALES DEPARTMENTS: MANCHESTER, NEWCASTLE, LONDON, BRISTOL, BIRMINGHAM, LIVERPOOL, LEICESTER, NOTTINGHAM, AND LEEDS	} Mr. A. SHORE.
SHEFFIELD OVERALL FACTORY	
SILVERTOWN FLOUR MILL	Mr. J. EDE.
SILVERTOWN PACKING FACTORY	Mr. G. V. CHAPMAN.
SILVERTOWN SOAP WORKS	Mr. R. A. WALLIS.
SILVERTOWN SOAP WORKS	Mr. J. R. COWBURN.
SYDNEY (AUSTRALIA) TALLOW WORKS.....	Mr. L. MEGGITT.
WEST HARTLEPOOL LARD FACTORY	Mr. W. HOLLAND.

EMPLOYÉS.

NUMBER OF EMPLOYÉS, OCTOBER, 1914.

DISTRIBUTIVE DEPARTMENTS.

Collective
Totals.

General, Drapery, Woollens, Boot and Shoe, and Furnishing Offices.....	Manchester	728
Bank	"	50
Architect's Office	"	36
Grocery Department	"	389
Old Trafford Wharf, Bacon and Coffee	"	84
Paper, Twine, and Stationery Department Warehouse ..	"	24
Drapery Department	"	237
Woollen Cloth Department	"	163
Boot and Shoe, and Saddlery Department	"	83
Furnishing Department	"	127
Coal	"	9
Hides and Skins	"	10
Building	"	1,013
Dining-room	"	62
Engineers'	"	57
Scales	"	46
Traffic	"	63
Other Departments	"	83
		3,264

BRANCHES.

Newcastle Offices	147
" Boot and Shoe Department	30
" Drapery Department	209
" Furnishing	90
" Jewellery, &c., Department	82
" Provision Department.....	39
" Traffic	106
" Paper, &c., ...	32
" Coal	1
" Dining-room	21
" Laundry	5
" Building Department	62
" Woollens, &c., ...	33
" Architect's	8
" Dentistry	9
" Saddlery	34
" Cattle	3
" Grocery	43
" Green Fruit	20
" Pelaw Drug	490

Carried forward 1,464

Carried forward 3,264

NUMBER OF EMPLOYÉS, OCTOBER, 1914.

Collective
Totals.

Brought forward 3,264

BRANCHES—continued.

Brought forward.....	1,464
Newcastle—Pelaw Cabinet Department	277
" " Printing "	189
" " Engineering "	92
" " Clothing "	183
" " Dining-room "	6
	2,211
London Offices	165
" Grocery Department	63
" Bacon "	20
" Drapery "	77
" Woollens "	23
" Boot and Shoe Department	20
" Furnishing "	30
" Coal Department	6
" Dining-room Department	27
" Building "	239
" Engineers' "	40
" Traffic "	37
" Tailoring "	125
" Joint Packing "	36
" Other "	23
" Silvertown Factory	450
	1,381

JOINT ENGLISH AND SCOTTISH C.W.S.

London Tea and Coffee Department.....	436
Luton Cocoa Factory	271
Tea Estates.....	1,031
Insurance Department (late C.I.S.)	250
West Africa—Accra.....	2
	1,990

DEPÔTS.

Bristol	302
Cardiff	107
Northampton	36
	445

PURCHASING DEPÔTS.

Goole	7
Hull Bacon	5
Liverpool Branch—Grocery and Shipping	96
Longton Crockery.....	64
Irish Branches and Creameries	107
Tralee Bacon Factory.....	80

Carried forward..... 359

Carried forward..... 9,291

NUMBER OF EMPLOYÉS, OCTOBER, 1914.

Collective
Totals.
9,291

Brought forward

PURCHASING DEPÔTS — *continued.*

Brought forward	359	
Leeds Hides and Skins	11	
Beeston " "	8	
Stockton " "	4	
Newcastle Hides and Skins	14	
Birmingham Cycle	10	
		406

FOREIGN AND COLONIAL PURCHASING DEPÔTS.

New York	7	
Montreal	4	
Copenhagen	21	
Aarhus	15	
Gothenburg	12	
Odense	11	
Denia	3	
Herning	33	
Esbjerg	15	
West Africa—Freetown	4	
" " Makene	1	
		126

SALEROOMS.

Leeds	5	
Nottingham	3	
Birmingham	2	
Huddersfield	4	
Blackburn	1	
		15

SHIPPING OFFICES.

Garston	1	
Rouen	23	
		24

STEAMSHIPS.

"New Pioneer"	15	
"Fraternity"	15	
"Dinah"	3	
"Briton"	3	
		36

PRODUCTIVE WORKS.

Avonmouth Flour Mill	107	
Batley Woollen Mill	260	
Birtley Tinplate Works	40	
Brislington Butter Factory	76	
Broughton Cabinet Factory	219	
" Mantle "	308	
" Shirt "	740	
" Tailoring "	700	

Carried forward 2,450

Carried forward 9,898

NUMBER OF EMPLOYÉS, OCTOBER, 1914.

		Collective Totals. 9,898
Brought forward		
PRODUCTIVE WORKS— <i>continued.</i>		
Brought forward	2,450	
Broughton Underclothing Factory	185	
Bury Weaving Shed.....	343	
Crumpsall Biscuit Works	640	
Desboro' and Kettering Corset Factories.....	350	
Dudley Bucket and Fender Works	157	
Dunston Corn Mill	177	
" Soap Works	185	
Enderby Boot and Shoe Works	316	
Heckmondwike Currying Department.....	22	
" Shoe Works	358	
Huthwaite Hosiery Factory	674	
Irlam Soap Works	965	
Keighley Ironworks	137	
Leeds Ready-Mades	1,236	
" Brush Factory	242	
" Shoe Works	203	
Leicester Shoe Works, Knighton Fields.....	1,308	
" " Duns Lane	477	
" Printing Works	190	
Littleborough Flannel Factory.....	95	
Longsight Printing Works.....	1,180	
Manchester Millinery	35	
" Tobacco Factory.....	738	
" Sun Corn Mill	289	
" " Provender Mill	15	
Middleton Junction Preserve, Pickle, and Vinegar Works.....	686	
Oldham Star Corn Mill	98	
Pontefract Fellmongering	57	
Radcliffe Weaving Shed	194	
Rochdale Paint, &c., Works	19	
Rushden Boot Factory	466	
Sheffield Shirt Factory.....	135	
Silvertown Corn Mill	112	
" Soap Works	221	
Sydney Tallow Factory	53	
Wellingborough Closing and Legging Factory	135	
West Hartlepool Lard Refinery.....	25	
Wisbech Fruit Dépôt	24	
	—15,142	
Clitheroe Estate	7	
Coldham Farm, Wisbech.....	45	
Marden Fruit Farm	29	
Roden Estate.....	68	
" Convalescent Home.....	12	
Total.....	25,201	

MEETINGS AND OTHER COMING EVENTS

IN CONNECTION WITH THE SOCIETY IN 1915

Feb. 6—SATURDAY....Nomination Lists: Last day for receiving.

Mar. 9—TUESDAY Voting Lists: Last day for receiving.

„ 13—SATURDAY....Divisional Quarterly Meetings.

„ 20—SATURDAY....General Quarterly Meeting—Manchester.

May 8—SATURDAY....Nomination Lists: Last day for receiving.

June 8—TUESDAY Voting Lists: Last day for receiving.

„ 12—SATURDAY....Divisional Quarterly Meetings.

„ 19—SATURDAY....General Quarterly Meeting—Manchester.

„ 26—SATURDAY....Half-yearly Stocktaking.

Aug. 7—SATURDAY....Nomination Lists: Last day for receiving.

Sept. 7—TUESDAY Voting Lists: Last day for receiving.

„ 11—SATURDAY....Divisional Quarterly Meetings.

„ 18—SATURDAY....General Quarterly Meeting—Manchester.

Nov. 6—SATURDAY....Nomination Lists: Last day for receiving.

Dec. 7—TUESDAY Voting Lists: Last day for receiving.

„ 11—SATURDAY....Divisional Quarterly Meetings.

„ 18—SATURDAY....General Quarterly Meeting—Manchester.

„ 25—SATURDAY....Half-yearly Stocktaking.

RECORD OF EVENTS IN C.W.S. HISTORY.

Date.	Events.
1860 (Aug. 12).....	Tea Party and Discussion at Lowbands Farm, Jumbo. Committee appointed to prepare the way for federation.
„	Conference at Oldham.
„ (Oct. 7)	Conference at Rochdale.
„ (Dec. 25).....	The Committee formed at Jumbo reports to a Conference at Manchester. Further steps taken to alter the law.
1861 (Mar. 29)	Further Conference at Oldham.
„ (June)	The Co-operators' Bill introduced, but abandoned for the Session.
„ (Dec. 25).....	Further Conference at Rochdale.
1862	Industrial and Provident Societies Act passed.
„	Midland Counties Co-operative Wholesale Industrial and Provident Society Limited established at Northampton.
„ (Good Friday)..	“Northern Union of Co-operative Stores” projected at Newcastle.
1863 (April 3)	Special Conference in Ancoats, Manchester. C.W.S. resolved upon.
„ (June 8 and July 25)	C.W.S. Rules drafted.
„ (Aug. 11).....	C.W.S. legally enrolled.
„ (Oct. 10).....	First Meeting after enrolment.
„ (Nov. 21)	First General Meeting of the C.W.S. Officers and Committee appointed.
1864 (Mar. 14).....	C.W.S. commenced business at 3, Cooper Street, Manchester.
„ (May 21).....	C.W.S. Half-yearly Meeting in the Temperance Hall, Manchester. Thirty-two Societies represented.
„ (Nov.)	C.W.S. removes to 28, Cannon Street, Manchester. Dividend of 1½d. in the £ declared on purchases.
1865	C.W.S. occupies premises at 53, Dantzic Street.
1866 (April 24)	Butter Buyer appointed, and Tipperary Dépôt opened.
„ (April)	Establishment of Newcastle Branch mooted.
1867 (April 19)	Insurance Conference at Downing Street, Manchester.
„	Industrial and Provident Societies Act annuls the limitation of Societies' Investments.
„ (June 8)	Glasgow Conference to found Scottish C.W.S. English C.W.S. represented.
„ (Aug. 29).....	Co-operative Insurance Company (Society) registered.
„ (Nov. 16).....	Rules altered. Quarterly Meetings and Balance Sheets decided upon. Depreciation on Buildings commenced. Committee enlarged from seven to nine Members. Membership restricted to Retail Societies.
„	The <i>Grocer</i> attempts to organise a boycott.
1868 (June 1)	Kilmallock Purchasing Dépôt opened.
1869 (Mar. 1)	First Balloon Street Warehouse opened.

Record of Events in C.W.S. History.

Date.	Events.
1869 (May 31).....	First Co-operative Congress (present series) and Co-operative Exhibition held in London.
„ (July 12).....	Limerick Dépôt opened.
1870 (Good Friday)..	Conference on Banking at Bury.
„ (Aug.)	Abraham Greenwood resigns the Chairmanship to become Cashier. Mr. James Crabtree elected Chairman.
„	Midland Counties Wholesale Society wound up.
1871	A Southern C.W.S. proposed.
„	Extension of Balloon Street Premises.
„	Industrial and Provident Societies Act amended.
„ (Feb. 18).....	Rules altered to allow of Manufacturing.
„ (Aug. 19).....	Newcastle Branch authorised.
„ (Sept. 2)	<i>Co-operative News</i> commenced publication.
1872 (May)	Pudding Chare (Newcastle) Premises opened.
„	Congress Discusses Banking.
„ (May 18).....	First Steps towards Banking Department taken.
„ (July 8)	Industrial Bank (Newcastle) commenced.
„ (Aug.)	Manchester Boot and Shoe Department constituted.
„ (Oct. 14)	“Deposit and Loan Department” commenced.
„ (Oct. 26)	Conference at Banbury urges Wholesale to manufacture Boots.
„ (Nov. 16).....	C.W.S. authorised to commence Production (Biscuits and Sweets and Boots and Shoes).
„ (Nov. 16).....	“North of England” dropped from the Society’s Title.
„ (Nov. 16).....	C.W.S. adopts Profit-sharing.
1873	Wreck of S.S. <i>St. Columba</i> leads to C.W.S. forming an Insurance Fund.
„	Coal “Famine.”
„ (Jan. 13).....	Crumpsall Works purchased.
„ (Feb. 11).....	Aberdare Society agitate for C.W.S. Dépôt at Cardiff or Bristol.
„ (Feb. 15).....	London Branch discussed.
„ (April 14)	Armagh Dépôt opened.
„ (May 17).....	Committee authorised to establish a London Branch.
„ (June 2)	Manchester Drapery Department commenced.
„ (July 14).....	Waterford Dépôt opened.
„ (Aug. 2)	“United Coal Mining Society” formed.
„ (Sept. 15)	Leicester Boot and Shoe Works (Duns Lane) commenced.
1874 (Jan. 22).....	Waterloo Street Warehouse (Newcastle) opened.
„ (Feb. 2)	Tralee Dépôt opened.
„ (Mar. 9)	London Branch opened in the Minories.
„ (Mar.)	Joint Action with Scottish C.W.S. begun.
„ (May)	Mr. James Crabtree retires from the Chairmanship. J. T. W. Mitchell succeeds.
„ (Sept. 20)	Durham Soap Works purchased.
„ (Sept. 24)	Rules altered to provide for Representation and Government of Branches.
„ (Dec. 19).....	London Branch Committee appointed.
„ (Dec.)	Leicester Factory (Duns Lane) purchased.

Record of Events in C.W.S. History.

Date.	Events.
1875 (April 2)	Liverpool Purchasing Department commenced.
„ (June 15).....	Manchester Drapery Warehouse, Dantzic Street, opened.
1876 (Feb. 21).....	New York Depôt established.
„ (May 24).....	S.S. <i>Plover</i> purchased.
„ (July 16).....	Manchester Furnishing Department commenced.
„ (Sept.)	Transfer of Industrial Bank contemplated.
„ (Oct. 5)	Industrial Bank fails.
„ (Nov. 25)	Special Conference <i>re</i> C.W.S. attitude towards Industrial Bank and Ouseburn Works. C.W.S. exonerated from blame.
„	Industrial and Provident Societies Act legalises Banking. C.W.S. "Loan and Deposit" Department becomes the "Banking Department."
1877 (Jan. 15).....	Cork Depôt established.
„	First Drapery Traveller sent out.
„ (April)	"United Coal Mining Society" fails. Bugle Horn Colliery taken over by C.W.S.
1879 (Jan. 18).....	Garston Forwarding Depôt commenced.
„ (Feb. 21).....	S.S. <i>Pioneer</i> launched.
„ (Mar. 24)	Rouen Depôt opened.
„ (June 30)	Goole Forwarding Depôt opened.
„ (July 19)	Foundation Stone of London Warehouse, Hooper Square, laid by Judge Hughes.
„	Industrial Depression. Decrease in Sales.
1880 (Jan. 1)	C.W.S. <i>Annual</i> first issued.
„ (June 30).....	S.S. <i>Plover</i> sold.
„ (Aug. 14).....	Heckmondwike Boot and Shoe Works commenced.
1881 (Jan. 12).....	Leman Street (London) Premises opened.
„	S.S. <i>Cambrian</i> purchased.
„ (June 6)	Copenhagen Depôt opened.
„ (July 30).....	Conference at Wakefield asks for Yorkshire Branch of C.W.S.
1882 (Mar.)	Bugle Horn Colliery sold.
„ (May)	Dining-room, Balloon Street, opened.
„ (Oct. 31)	Leeds Saleroom opened.
„ (Nov. 1)	Tea Department, London, commenced.
1883 (Feb. 10).....	Conference at Plymouth on a Western C.W.S. Branch.
„ (July)	Direct Cargo of Tea for C.W.S. comes from China.
„	S.S. <i>Marianne Briggs</i> bought and re-named <i>Unity</i> .
„ (Nov. 3)	Rules altered: General and Branch Committees enlarged.
1884 (April-June) ..	First Deputation to America.
„ (Sept. 13)	Commemoration of the Society's Twenty-first Anniversary at Newcastle-on-Tyne and London.
„ (Sept. 20)	Commemoration at Manchester.
„ (Sept. 29)	Bristol Depôt commenced business.
„ (Oct. 6)	S.S. <i>Progress</i> launched.
„	Hamburg Depôt opened.
1885 (Aug. 25).....	Huddersfield Saleroom opened.
„ (Dec. 30).....	Fire at the London Tea Department.

Record of Events in C.W.S. History.

Date.	Events.
1886 (April 22)	Nottingham Saleroom opened.
„ (Aug. 25).....	Longton Depôt opened.
„ (Aug.)	C.W.S. Buyer first visits Greece.
„ (Oct. 12)	S.S. <i>Federation</i> launched.
„ (Dec. 4)	Cloth Making, Flour Milling, and Cocoa Manufacture authorised.
1887	£20,000 invested in Ship Canal.
„ (Mar. 14)	Batley Mill commenced.
„ (June).....	Pepper Grinding commenced.
„ (Aug. 29)	Heckmondwike Currying Department commenced.
„ (Oct.)	Employés' Sick and Burial Club instituted.
„ (Nov. 2)	Manufacture of Cocoa and Chocolate commenced.
„ (Nov. 2)	London (Leman Street) New Premises opened.
1888	Enderby Boot Factory opened.
„ (July)	S.S. <i>Equity</i> launched.
„ (July)	Irish Co-operative Aid Association formed.
1889	C.W.S. take Shares in First Irish Dairy Society registered—Dromcollogher.
„ (Oct. 21)	First C.W.S. Dried Fruit Sale held at Liverpool.
1890 (May 16).....	Blackburn Saleroom opened.
„ (June 10)	Leeds Clothing Factory commenced.
„ (Oct. 22)	Northampton Saleroom opened.
1891 (Mar. 7)	First Divisional Meetings held.
„ (Mar. 14)	Land Purchased at Broughton.
„ (April 18)	Dunston Corn Mill opened.
„ (June)	Site for Irlam Works purchased.
„ (June 20)	Profit-sharing finally rejected.
„ (Oct. 22)	Cardiff Saleroom opened.
„ (Nov. 4)	Leicester Wheatsheaf Works opened.
„ (Nov. 4)	Aarhus Depôt opened.
1892 (April 9)	Special Meetings endorse Committee's policy on Insurance Fund.
„ (April 16)	Coal Conference at Balloon Street.
„ (May 5)	Birmingham Saleroom opened.
„ (Dec. 17 and 21)	Newcastle Branch Coming-of-Age Celebrations.
1893 (May 8).....	Broughton Cabinet Factory opened.
1894 (Jan. 1)	Ship Canal opened for Traffic. S.S. <i>Pioneer</i> first Merchant Vessel to reach Manchester from oversea.
„ (June)	Montreal Depôt established.
„ (Oct. 2)	Irlam Works opened.
„ (Dec. 8).....	Quarterly Meetings endorse Committee's policy on Depreciation.
1895	Broughton Tailoring Factory commenced.
„ (Jan. 23).....	Printing Department commenced.
„ (Mar. 9)	First C.W.S. Creamery (Castlemahon) acquired.
„ (Mar. 16)	Death of J. T. W. Mitchell.
„	Mr. J. Shillito elected Chairman.
„ (April 24)	London Branch Coming-of-Age Celebrations.
„ (June).....	Durham Soap Works closed.

Record of Events in C.W.S. History.

Date.	Events.
1895 (Aug. 5)	Gothenburg Dépôt opened.
„ (Oct.)	S.S. <i>Unity</i> run down and sunk in River Seine.
1896 (Jan. 2)	Architect's Department formed.
„ (April 24)	West Hartlepool Lard Refinery purchased.
„ (June 13)	Roden Estate purchased.
„ (June 26).....	Middleton Jam Works commenced.
„ (July 1)	The <i>Wheatsheaf</i> first published.
„	Denia Dépôt opened.
„	Broughton Mantle, Shirt, and Underclothing Factories opened.
1897 (Feb. 10).....	Northampton (Guildhall Road) Premises opened.
„ (Mar. 1)	Broughton New Tailoring Factory opened.
„ (Mar. 22)	London Tea Department New Premises opened.
„ (Aug. 7)	Sydney Dépôt commenced.
„ (Sept. 11)	Committee authorised to tender for Government and Municipal Supplies.
1898 (Mar. 12).....	Tobacco Factory (Manchester) purchased.
„ (April 1)	Littleborough Flannel Mill acquired.
„ (June 11).....	Quarterly Meetings agree to Augmentation of Insurance Fund.
„ (June 26).....	Odense Dépôt opened.
„ (July 11).....	Longsight Printing Works commenced.
„ (Oct. 20)	Corset Making commenced.
„ (Dec. 10).....	Half-yearly Stocktakings commenced.
„ (Dec. 10).....	Rules altered to extend C.W.S. Insurance Business.
1899 (June 10).....	Newcastle Branch Quarterly Meeting first held at West Blandford Street.
„ (June 25)	C.W.S. Dividend rises to 4d.
„ (Dec. 16).....	Rushden Boot Factory purchased.
1900 (Jan. 19).....	Herning Bacon Factory purchased.
„ (April 14)	Silvertown Flour Mills opened.
1901 (April 30)	Sydney Tallow Factory purchased.
„ (July 27)	Roden Convalescent Home opened.
„ (Aug.-Nov.).....	Coal Conferences. C.W.S. Coal-mining recommended.
„ (Sept.).....	Bute Terrace (Cardiff) Premises opened.
„ (Sept. 3)	Tralee Bacon Factory commenced.
„	Tax of 4s. 2d. placed on Sugar.
1902 (April 9)	Pershore Street (Birmingham) New Premises opened, and Cycle Dépôt established.
„ (April 25).....	Fire at Newcastle Branch.
„ (May 1)	Work commenced at Pelaw Drug Factory.
„ (June 21)	Nugawella and Weliganga (Ceylon) Tea Estates purchased.
„ (Sept. 8)	Luton Cocoa Works opened.
„ (Sept.).....	Work commenced at Pelaw Cabinet Factory.
„ (Nov. 1)	Launch of S.S. <i>Unity</i> (II.).
1903 (June 20)	Trafford Wharf and land purchased.
„ (July 1).....	Leicester Hosiery Factory taken over.
„ (Oct. 24)	Launch of S.S. <i>Fraternity</i> .

Record of Events in C.W.S. History.

Date.	Events.
1904	London Brushmaking transferred to Leeds.
„ (Jan. 25).....	Employés start Thrift Fund.
„ (Feb. 20).....	Marden Fruit Farm purchased.
„ (April 18)	New Drapery Buildings (Manchester) opened.
„ (June 20)	Brislington Butter Factory commenced.
„ (June 20)	C.W.S. Committee report against buying Collieries. Coal Department re-organised.
„ (July 1)	Huddersfield Brush Factory taken over.
„	Collective Life Assurance instituted by C.I.S.
„	Silvertown Grocery Productive Factory built.
1905 (Feb. 15).....	Weaving commenced at Bury.
„ (June 17)	Special Committee on C.W.S. Constitution appointed.
„ (July 3)	Desborough Corset Factory opened.
„ (Sept. 5)	Esbjerg Depôt opened.
„ (Oct. 26)	Launch of S.S. <i>New Pioneer</i> .
1906 (Jan. 1)	Rochdale Flour Mill taken over.
„ (Mar. 31)	Star Mill (Oldham) taken over.
„ (April 28)	Sun Flour Mill bought.
„ (May 16).....	Broad Quay (Bristol) Premises opened.
„ (July 21).....	Report of Special Committee adopted. Unification of General and Branch Committees.
„ (Oct. 11 to Nov. 23)	“ Soap Trust ” Agitation.
„ (Dec.)	East Coast Shipping Department closed.
„ (Dec. 15).....	Land and Buildings Purchased for Leeds New Brush Works.
1907	Output of C.W.S. Soap increased by one-third over 1906.
„	C.W.S. House - building Scheme (Bank Advances— instituted 1897, suspended 1901) re-opened.
„ (June 15).....	Grants by Committee to Employés' Thrift Fund approved.
„ (Aug.)	Minimum Wage extended to all Adult Male Employés.
„ (Sept. 14)	Mitchell Memorial Hall opened.
„ (Oct. 1)	Huddersfield New Saleroom opened.
„ (Nov. 9)	Special Insurance Conference at Middlesbrough. C.W.S. urged to take action.
1908 (Feb. 4)	Huthwaite Hosiery Factory commenced.
„ (May 18).....	Silvertown Soap Works opened.
„ (June 29)	Keighley Ironworks, Dudley Bucket and Fender Works, and Birtley Tinplate Works taken over.
„	Sugar Tax Reduced to 1s. 10d.
1909 (Jan. 16)	Irish Creamery Conference. C.W.S. agree to transfer Creameries.
„ (Feb. 15).....	Dunston-on-Tyne Soap Works opened.
„ (Feb. 22).....	Pontefract Fellmongering commenced.
„ (April 5)	Leicester Printing Works commenced.
1910 (April)	Individual Deposits accepted by C.W.S. Bank.
„ (April 27)	Avonmouth Flour Mill opened.
„ (July 19).....	Leman Street (London) Extensions opened.
„ (Dec. 17).....	Special Meetings endorse Committee's policy on Insurance.

Record of Events in C.W.S. History.

Date.	Events.
1911 (Oct. 18)	Hearing of the case Masbro' Equitable Co-operative Society Limited v. Lever Bros. Limited and Benjamin Brooke and Co. Limited. C.W.S. defends. Judgment for defendants.
„ (Dec. 1)	Rochdale Paint Works commenced.
1912 (Feb. 29 to Mar. 2)	Plaintiffs' Appeal in Soap Case dismissed.
„ (Mar. 16)	Land Bought for Leeds Boot and Shoe Works.
„ (July 3)	C.W.S. Health Insurance Section formed.
„ (Aug. 6)	Wisbech Estate purchased.
„ (Aug. 12)	Radcliffe Weaving Shed commenced.
„ (Dec. 21)	Transfer of Co-operative Insurance Society agreed to by C.W.S. Quarterly Meetings.
„ (Dec. 21)	Delegates recommend Adoption of Minimum Wage for Girl and Women Workers on the "Congress" Scale.
1913 (Jan. 20)	Sheffield Shirt Factory opened.
„	Denmark (Ceylon) Tea Estate purchased.
„	Lower Barcaple and Westhall (Ceylon) Tea Estates purchased.
„ (Sept. 13)	Clitheroe Estates purchased.
„ (Sept. 13 & 20)	The Society celebrates its Jubilee.
„ (Sept. 26)	First Food Ship (S.S. <i>Hare</i>) left Ship Canal for Dublin.
„	Depôt at Makene (Sierra Leone) established.
1914	South Wynaad (Southern India) Tea Estates purchased.
„	Depôt at Accra (Gold Coast) established.
„	Freetown (Sierra Leone) Trading Store opened.



LIST OF TELEGRAPHIC ADDRESSES.

ARMAGH DEPÔT: "WHOLESALE, ARMAGH."
AVONMOUTH FLOUR MILL: "WHOLESALE, AVONMOUTH."
BATLEY WOOLLEN MILL: "WHOLESALE, BATLEY."
BEESTON HIDE AND SKIN DEPARTMENT: "WHOLESALE, BEESTON,
NOTTS."
BIRMINGHAM CYCLE DEPÔT: "CO-OPERATE, BIRMINGHAM."
BIRMINGHAM SALEROOM: "CO-OPERATE, BIRMINGHAM."
BIRTLEY TINPLATE WORKS: "WHOLESALE, BIRTLEY."
BLACKBURN SALEROOM: "WHOLESALE, BLACKBURN."
BRISLINGTON BUTTER FACTORY: "FACTORY, BRISLINGTON."
BRISTOL DEPÔT: "WHOLESALE, BRISTOL."
BROUGHTON CABINET FACTORY: "CO-OPERATOR, MANCHESTER."
BROUGHTON SHIRT, UNDERCLOTHING, AND MANTLE FACTORY:
"JACKETS, MANCHESTER."
BROUGHTON TAILORING FACTORY: "TAILORING, MANCHESTER."
BURY WEAVING SHED: "WHOLESALE, BURY."
CARDIFF SALEROOM: "WHOLESALE, CARDIFF."
CARDIFF CO-OPERATIVE INSURANCE SOCIETY: "COLLECTIVE, CARDIFF."
CENTRAL, MANCHESTER: "WHOLESALE, MANCHESTER."
CORK DEPÔT: "WHOLESALE, CORK."
CRUMPSALL WORKS: "BISCUIT, MANCHESTER."
DESBORO' CORSET FACTORY: "WHOLESALE, DESBORO'."
DUDLEY BUCKET WORKS: "WHOLESALE, DUDLEY."
DUNSTON-ON-TYNE SOAP WORKS: "SOAP, DUNSTON-ON-TYNE."
DUNSTON-ON-TYNE CORN MILL: "WHOLESALE, GATESHEAD."
GOOLE DEPÔT: "WHOLESALE, GOOLE."
HARTLEPOOL LARD REFINERY: "WHOLESALE, WEST HARTLEPOOL."
HECKMONDWIKE SHOE WORKS: "WHOLESALE, HECKMONDWIKE."
HUDDERSFIELD SALEROOM: "WHOLESALE, HUDDERSFIELD."
HULL BACON: "WHOLESALE, HULL."
HUTHWAITE HOSIERY FACTORY: "WHOLESALE, HUTHWAITE."
IRLAM SOAP WORKS: "WHOLESALE, CADISHEAD."
KEIGHLEY IRONWORKS: "WHOLESALE, KEIGHLEY."
LEEDS BRUSH FACTORY: "BROOMS, LEEDS."
LEEDS READY-MADES FACTORY: "SOCIETY, LEEDS."
LEEDS SHOE WORKS: "SYSTEM, LEEDS."
LEEDS SALE AND SAMPLE ROOMS: "WHOLESALE, LEEDS."
LEEDS HIDE AND SKIN DEPARTMENT: "SKINS, LEEDS."
LEICESTER PRINTING WORKS: "TYPOGRAPHY, LEICESTER."
LEICESTER SHOE WORKS: "WHOLESALE, LEICESTER."
LIMERICK DEPÔT: "WHOLESALE, LIMERICK."
LIVERPOOL OFFICE AND WAREHOUSE: "WHOLESALE, LIVERPOOL."

LIST OF TELEGRAPHIC ADDRESSES—*continued.*

- LONDON BRANCH: "WHOLESALE (ALD.*), LONDON."
 LONDON TEA DEPARTMENT: "LOOMIGER (ALD.*), LONDON."
 LONDON CO-OPERATIVE INSURANCE SOCIETY: "CENTRICAL, WESTCENT,
 LONDON."
 LONGSIGHT PRINTING WORKS: "TYPOGRAPHY, MANCHESTER."
 LONGTON CROCKERY DEPÔT: "WHOLESALE, LONGTON (STAFFS.)."
 LUTON COCOA WORKS: "WHOLESALE, LUTON."
 MANCHESTER CENTRAL: "WHOLESALE, MANCHESTER."
 MANCHESTER CO-OPERATIVE INSURANCE SOCIETY: "COLLECTIVE,
 MANCHESTER."
 MANCHESTER HIDE AND SKIN DEPARTMENT: "SKINS, MANCHESTER."
 MANCHESTER SUN MILL: "SUNLIKE, MANCHESTER."
 MANCHESTER TOBACCO FACTORY: "TOBACCO, MANCHESTER."
 MARDEN FRUIT FARM: "WHOLESALE, MARDEN, HEREFORD."
 MIDDLETON PRESERVE WORKS: "WHOLESALE, MIDDLETON
 JUNCTION."
 NEWCASTLE BRANCH: "WHOLESALE, NEWCASTLE-ON-TYNE."
 NEWCASTLE CO-OPERATIVE INSURANCE SOCIETY: "COLLECTIVE,
 NEWCASTLE."
 NEWCASTLE BRANCH, PELAW: "WHOLESALE, BILL-QUAY."
 NEWCASTLE BRANCH, CATTLE DEPARTMENT: "KYLOE, NEWCASTLE."
 NEWCASTLE BRANCH, GREENGROCERY (STOWELL STREET): "LOYALTY,
 NEWCASTLE."
 NORTHAMPTON SALEROOM: "WHOLESALE, NORTHAMPTON."
 NOTTINGHAM SALEROOM: "WHOLESALE, NOTTINGHAM."
 OLDHAM STAR MILL: "STAR, OLDHAM."
 PONTEFRACT FELLMONGERING: "WHOLESALE, PONTEFRACT."
 RADCLIFFE WEAVING SHED: "WHOLESALE, RADCLIFFE."
 ROCHDALE PAINT WORKS: "WHOLESALE, ROCHDALE."
 RODEN ESTATE: "WHOLESALE, RODEN."
 RUSHDEN BOOT WORKS: "WHOLESALE, RUSHDEN."
 SHEFFIELD SHIRT FACTORY: "OVERALLS, SHEFFIELD."
 SILVERTOWN FLOUR MILL: "CO-OPERATIF (SILVER.*), LONDON."
 SILVERTOWN PRODUCTIVE: "PRODUCTIVO (SILVER.*), LONDON."
 SILVERTOWN SOAP WORKS: "OPERSAPO (SILVER.*), LONDON."
 TRALEE BACON FACTORY: "BACON, TRALEE."
 TRALEE DEPÔT: "WHOLESALE, TRALEE."
 WISBECH FRUIT DEPÔT: "WHOLESALE, WISBECH."

The words "Ald." and "Silver." being indicator words are transmitted free.

TELEPHONIC COMMUNICATION.

Our Premises in the following towns are directly connected with the Local Telephone System:—

					No.
MANCHESTER	GENERAL OFFICES				
"	DRAPERY DEPARTMENT				
"	BOOT AND SHOE DEPARTMENT				
"	FURNISHING DEPARTMENT				61,
"	*CRUMPSALL				CITY.
"	†LONGSIGHT				
"	*TOBACCO				
"	*BROUGHTON CABINET WORKS, &c.				
"	JOINT INSURANCE DEPARTMENT			CITY	7497
"	NATIONAL HEALTH INSURANCE DEPT.			"	7498
"	HIDE AND SKIN DEPARTMENT			CENTRAL	7784
"	POMONA DOCK			"	5180
NEWCASTLE	WATERLOO STREET AND				4603
	WEST BLANDFORD STREET..	POST OFFICE			284
"	WEST BLANDFORD STREET				1787
"	"	"	"		1260
"	"	"	"		1969
"	"	"	"		2506
"	"	"	"		2507
"	"	"	"		498
"	CATTLE				1989
"	SADDLERY DEPT. (West Blandford Street)				2116
"	GREENGROCERY DEPT. (Stowell Street)			CENTRAL	1524
"				(New Bridge Street)	2463
"	QUAYSIDE WAREHOUSE				1304
"				GROCERY..CENTRAL	564
"	PELAW WORKS			GATESHEAD	121
"				NEWCASTLE	2806
"	HIDES AND SKINS (St. Andrew's Street)				2907
"	ARCHITECT'S (Westmorland Road)			CITY	478
"	DENTISTRY				335
"	INSURANCE DEPT.			"	2826
LONDON	GENERAL OFFICE				
"	GROCERY SALEROOM				
"	DRAPERY..				
"	GROVE STREET				
"	READY-MADES				AVENUE
"	TEA DEPARTMENT				7100.
"				GENERAL OFFICE	
"	FURNISHING AND BOOT DEPARTMENT				
"	BUILDING AND ENGINEERING DEPARTMENT				
"	TRAFFIC				
"	JOINT INSURANCE DEPARTMENT			CITY	1698
AVONMOUTH	FLOUR MILL				51 & 52
BATLEY					101
BEESTON	HIDE AND SKIN DEPARTMENT				55
BIRMINGHAM	CYCLE DEPOT			MIDLAND	838
BIRMINGHAM	SALEROOM			"	838
BIRTLEY	TINPLATE WORKS				15
BRISTOL				(Private Exchange)	1915

* Sub. to Manchester General Offices. † Also 1057, Rusholme.

TELEPHONIC COMMUNICATION—*continued.*

	Nos.
BRISTOL .....(Private Exchange)	1914
"	1915
"	1916
"	1917
"	1918
" BRISLINGTON BRISTOL	1643
BURY.....	179
CARDIFF.....(3 lines)	4615
" CO-OPERATIVE INSURANCE SOCIETY	2857
DESBOROUGH CORSET FACTORY	22
DUDLEY BUCKET WORKS	22
DUNSTON FLOUR MILL CENTRAL	1182
"	1183
" SOAP WORKS GATESHEAD	426
"	11
" DUNSTON	32
ENDERBY NARBORO'	6
GARSTON	2
GOOLE	112
HECKMONDWIKE	310
HUDDERSFIELD	2196
HULL BACON CORPORATION	66 & 67
HUTHWAITE HOSIERY SUTTON-IN-ASHFIELD	281
IRLAM URMSTON	282
KEIGHLEY IRONWORKS	160
LEEDS—SALEROOM CENTRAL	2098
" READY-MADES, HOLBECK	1648
" BRUSH FACTORY	4035
" HIDE AND SKIN DEPARTMENT	4314
" SHOE WORKS CENTRAL	1315
"	1316
LEICESTER—WHEATSHEAF WORKS	1132
"	235
" DUNS LANE.....CENTRAL	1829
" PRINTING WORKS.....	1144
LITTLEBOROUGH FLANNEL FACTORY	63
LIVERPOOL—VICTORIA STREET CENTRAL	7862
" REGENT ROAD	5861
LONGTON	16
LUTON	113
MANCHESTER SUN MILL.....TRAFFORD PARK	334
"	335
"	336
"	33
MIDDLETON PRESERVE WORKS FAILSWORTH	206
NORTHAMPTON SALEROOM	2106
NOTTINGHAM SALEROOM.....	171
OLDHAM STAR MILL	33
PONTEFRAC T FELLMONGERING	356
RADCLIFFE WEAVING SHED WHITEFIELD	755
ROCHDALE PAINT WORKS	10
RUSHDEN	461
SHEFFIELD SHIRT FACTORY.....	602
SILVERTOWN FLOUR MILL EASTERN	1656
" PRODUCTIVE	1354
" SOAP WORKS	1723
" DINING ROOM	286
WEST HARTLEPOOL LARD REFINERY	58
WISBECH.....	

CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

PAST MEMBERS OF GENERAL COMMITTEE.

Name.	Nominating Society.	Elected.	Retired.
*A. Greenwood	Rochdale	1864 March....	1874 August.
†Councillor Smithies ..	Rochdale	1864 March....	1869 May.
§James Dyson	Manchester	1864 March....	1867 May.
John Hilton	Middleton	1864 March....	1868 Nov.
Charles Howarth	Heywood	1864 March	1866 October.
J. Neild	Mossley	{ 1864 March 1867 Nov.	{ 1865 Nov. 1868 Nov.
Thomas Cheetham....	Rochdale	1864 March	1865 Nov.
*James Crabtree	Heckmondwike ..	{ 1865 Nov. 1885 Dec. 1886 June	{ 1874 May. 1886 March. 1889 Dec.
W. Nuttall	Oldham	{ 1865 Nov. 1876 June	{ 1866 Feb. 1877 Dec.
John Thomasson	Oldham	1866 May	1869 Nov.
Edward Hooson	Manchester	1866 May	1869 Dec.
§E. Longfield	Manchester	1867 May	1867 Nov.
Isaiah Lee	Oldham	1867 Nov.	1868 Nov.
†J. M. Percival	Manchester	{ 1868 Feb. 1870 Feb. 1876 March	{ 1868 May. 1872 August. 1882 June.
§D. Baxter.....	Manchester	1868 May	1871 May.
J. Swindles	Hyde	1868 Nov.	1869 Nov.
T. Sutcliffe	Todmorden	1868 Nov.	1869 Nov.
†James C. Fox	Manchester	1868 Nov.	1871 May.
W. Marcroft.....	Oldham	1869 May	1871 May.
*§J. T. W. Mitchell....	Rochdale	1869 Nov.	1895 March.
Thomas Pearson.....	Eccles	1869 Nov.	1871 Nov.
R. Holgate	Over Darwen	1869 Nov.	1870 Nov.
A. Mitchell	Rochdale	1870 August ..	1870 Nov.
W. Moore.....	Batley Carr	1870 Nov.	1871 August.
†Titus Hall	Bradford	{ 1871 May 1877 June	{ 1874 Dec. 1885 Dec.
B. Hague	Barnsley	{ 1871 May 1874 Dec.	{ 1873 May. 1884 Sept.
Thomas Shorrocks....	Over Darwen	1871 May	1871 Nov.

PAST MEMBERS OF GENERAL COMMITTEE—*continued.*

Name.	Nominating Society.	Elected.	Retired.
† R. Allen	Oldham	1871 August ..	1877 April.
Job Whiteley	Halifax	1871 August ..	1872 Feb.
		1873 Feb.	1874 Feb.
† Thomas Hayes	Failsworth	1871 Nov.	1873 August.
Jonathan Fishwick ...	Bolton	1871 Nov.	1872 Feb.
J. Thorpe	Halifax	1872 Feb.	1873 Feb.
† W. Johnson	Bolton	1872 Feb.	1876 June.
		1877 June	1885 March.
§ H. Whiley	Manchester	1872 August ..	1874 Feb.
		1874 May	1876 March.
J. Butcher	Banbury	1873 May	1873 August.
H. Atkinson.....	Blaydon-on-Tyne ..	1873 August ..	1874 Dec.
William Bates.....	Eccles	1873 August ..	1907 June.
J. F. Brearley	Oldham	1874 Feb.	1874 Dec.
Robert Cooper.....	Accrington	1874 Feb.	1876 June.
H. Jackson	Halifax	1874 Dec.	1876 June.
J. Pickersgill	Batley Carr	1874 Dec.	1877 March.
W. Barnett	Macclesfield.....	1874 Dec.	1882 Sept.
John Stansfield	Heckmondwike	1874 Dec.	1898 June.
Thomas Bland	Huddersfield	1874 Dec.....	1907 March.
S. Lever	Bacup	1876 Sept.	1885 Sept.
		1886 March....	1888 May.
F. R. Stephenson	Halifax	1876 Sept.	1877 March.
Thomas Hind	Leicester	1877 June	1912 October.
R. Whittle	Crewe	1877 Dec.	1886 March.
† Thos. Swann	Masborough.....	1882 Sept.	1899 Feb.
E. Hibbert	Failsworth	1882 Sept.	1895 June.
John Lord	Accrington	1883 Nov.	1907 Sept.
Joseph Mc.Nab	Hyde	1883 Dec.	1886 March.
Alfred North	Batley	1883 Dec.	1905 August.
James Hilton	Oldham	1884 Sept.	1890 January.
James Lownds	Ashton-under-Lyne..	1885 March	1895 July.
Samuel Taylor	Bolton	1885 Sept.	1891 Dec.
William P. Hemm....	Nottingham	1888 Sept.	1889 August.
Amos Scotton	Derby	1890 June	1904 October.
James Fairclough	Barnsley	1895 Sept.	1911 June.

* Held Office as President.

† Held Office as Secretary.

‡ Held Office as Secretary and Treasurer.

§ Held Office as Treasurer.

* PAST MEMBERS OF NEWCASTLE BRANCH COMMITTEE.

Name.	Nominating Society.	Elected.	Retired.
Ephraim Gilchrist . . .	Wallsend	1873 Oct.	1874 Jan.
George Dover	Chester-le-Street . .	1874 Dec.	1877 Sept.
Humphrey Atkinson . .	Blaydon-on-Tyne . .	1874 Dec.	1879 May.
† Joseph Patterson . . .	West Cramlington . .	1874 Dec.	1877 Sept.
John Steel	Newcastle-on-Tyne . .	1874 Dec.	1876 Sept.
William Green	Durham	1874 Dec.	1891 Sept.
Thomas Pinkney	Newbottle	1874 Dec.	1875 March.
Richard Thomson . . .	Sunderland	1874 Dec.	1893 Sept.
† John Thirlaway	Gateshead	1876 Dec.	1892 May.
William Robinson . . .	Shotley Bridge . . .	1877 Sept.	1884 June.
William J. Howat . . .	Newcastle-on-Tyne . .	1877 Dec.	1883 Dec.
George Scott	Newbottle	1879 May	1893 Dec.
J. Atkinson	Wallsend	1883 Dec.	1890 May.
George Fryer	Cramlington	1883 Dec.	1887 Dec.
Matthew Bates	Blaydon	1884 June	1893 June.
Robt. Gibson	Newcastle-on-Tyne . .	1890 Sept.	1910 Sept.
George Binney	Durham	1891 Dec.	1905 May.
Robert Irving	Carlisle	1892 June	1904 August.
Thomas Rule	Gateshead	1893 June	1903 June.
William Stoker	Seaton Delaval . . .	1893 Sept.	1902 July.
Joseph Warwick	North Shields	1903 June	1912 Dec.
F. A. Ciappessoni . . .	Cleator Moor	1904 Dec.	1912 Feb.

* PAST MEMBERS OF LONDON BRANCH COMMITTEE.

Name.	Nominating Society.	Elected.	Retired.
J. Durrant	Arundel	1874 Dec.	1875 Dec.
John Green	Woolwich	1874 Dec.	1876 Dec.
† Thomas Fowe	Buckfastleigh	1874 Dec.	1878 March.
T. E. Webb	Battersea	1874 Dec.	1896 Dec.
J. Clay	Gloucester	1874 Dec.	1901 Oct.
H. Pumphrey	Lewes	1874 Dec.	1907 March.
Geo. Hines	Ipswich	1874 Dec.	1907 June.
† William Strawn	Sheerness	1875 Dec.	1882 March.
Frederick Lamb	Banbury	1876 Dec.	1888 Dec.
J. F. Goodey	Colchester	1878 Mar.	1885 June.
F. A. Williams	Reading	1889 Mar.	1910 Oct.
G. Sutherland	Reading	1882 June	1886 Sept.
Geo. Hawkins	Woolwich	1883 Dec.	1904 Oct.
J. J. B. Beach	Oxford	1885 June	1907 March.
R. H. Tutt	Colchester	1886 Dec.	1888 Dec.
W. H. Brown	Hastings	1897 March	1904 Feb.
	Newport	1902 Sept.	1907 April.

* Newcastle and London Branch Committees constituted December, 1874.

† Held Office as Secretary.

THE CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

MEMBERS OF GENERAL, AND NEWCASTLE AND
LONDON BRANCH COMMITTEES WHO HAVE
DIED DURING TIME OF OFFICE.

Name.	Nominating Society.	Date of Death.
GENERAL.		
Edward Hooson	Manchester	December 11th, 1869.
Robert Allen.....	Oldham	April 2nd, 1877.
Richard Whittle	Crewe	March 6th, 1886.
Samuel Lever	Bacup	May 18th, 1888.
William P. Hemm	Nottingham	August 21st, 1889.
James Hilton	Oldham	January 18th, 1890.
Samuel Taylor.....	Bolton	December 15th, 1891.
J. T. W. Mitchell.....	Rochdale.....	March 16th, 1895.
E. Hibbert	Failsworth	June 25th, 1895.
James Lownds.....	Ashton-under-Lyne ..	July 27th, 1895.
Thos. Swann.....	Masboro'	February 15th, 1899.
Amos Scotton	Derby	October 2nd, 1904.
Alfred North.....	Batley	August 14th, 1905.
James Fairclough	Barnsley	June 11th, 1911.
Thomas Hind	Leicester.....	October 26th, 1912.
NEWCASTLE.		
J. Atkinson	Wallsend.....	May 25th, 1890.
William Green.....	Durham	September 9th, 1891.
John Thirlaway	Gateshead	May 1st, 1892.
William Stoker	Seaton Delaval	July 4th, 1902.
Robert Irving	Carlisle'	August 22nd, 1904.
George Binney.....	Durham	May 5th, 1905.
F. A. Ciappessoni	Cleator Moor	February 20th, 1912.
Joseph Warwick	North Shields	December 6th, 1912.
LONDON.		
J. J. B. Beach	Colchester	December 21st, 1888.
T. E. Webb	Battersea	December 2nd, 1896.
J. Clay	Gloucester	October 25th, 1901.
R. H. Tutt	Hastings	February 26th, 1904.
G. Sutherland	Woolwich	October 17th, 1904.
W. H. Brown	Newport	April 20th, 1907.
J. F. Goodey.....	Colchester	October 5th, 1910.

CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

PAST AUDITORS.

Name.	Nominating Society.	Elected.	Retired.
D. Baxter.....	Manchester	1864 March	1868 May.
J. Hankinson	Preston.....	1864 May	1865 May.
E. Longfield	Manchester	1865 May	1867 May.
James White	Manchester	1867 May	1881 Sept.
W. Nuttall	Oldham	1868 May	1868 Nov.
		1873 Nov.....	1874 May.
A. Howard	Rochdale	1868 Nov.....	1870 May.
R. Taylor	Oldham	1870 May	1873 May.
		1873 Nov.....	1875 Feb.
J. C. Fox	Manchester	1872 May	1876 Sept.
		1876 Dec.....	1877 Sept.
H. C. Pingstone	Manchester	1872 May	1872 Nov.
W. Barnett	Macclesfield.....	1872 Nov.....	1873 Nov.
W. Grimshaw	Eccles	1873 May	1874 May.
J. Leach	Rochdale	1874 May	1878 June.
J. Odgers	Manchester	1874 May	1874 Sept.
J. M. Percival	Manchester	1875 March	1876 March.
W. Appleby	Manchester	1876 March	1888 Sept.
J. D. Kershaw	Oldham	1876 Oct.	1885 Sept.
James Kershaw	Rochdale	1878 June.....	1878 Sept.
W. Nuttall	Eccles	1879 March	1879 June.
T. Whitworth	Rochdale	1881 Dec.....	1885 June.
J. E. Lord	Rochdale	1885 Dec.....	1910 April.
Isaac Haigh.....	Barnsley	1888 August....	1903 Feb.
P. G. Redfearn	Birstall.....	1910 Sept.	1912 Sept.

PAST SCRUTINEER.

Name.	Nominating Society.	Elected.	Retired.
F. Hardern	Oldham	1890 Sept.	1913 Sept.

STATISTICS
SHOWING THE
PROGRESS OF
THE CO-OPERATIVE WHOLESALE
SOCIETY LIMITED.

PROGRESS FROM COMMENCEMENT IN MARCH, 1864, TO DEC., 1913.

YEAR ENDED	45 Shares taken up	No. of Members belonging to our Shareholders.	CAPITAL.					Total.
			Shares.	Loans and Deposits.	Trade and Bank Reserve Fund.	Insurance Fund.	Reserved Balances.	
			£	£	£	£	£	£
October, 1864 (30 weeks).....	..	18,337	2,455	Included	..	..	..	2,455
" 1865.....	..	24,005	7,182	in	..	..	..	7,182
" 1866.....	..	81,030	10,968	Shares.	82	..	..	11,050
January, 1868 (65 weeks).....	..	59,349	11,276	14,355	682	..	..	26,313
" 1869.....	..	74,737	14,888	16,059	1,115	..	..	32,062
" 1870.....	..	79,245	16,556	22,832	1,250	..	..	40,658
" 1871 (53 weeks).....	..	89,880	19,015	22,323	2,826	..	..	44,164
" 1872.....	5,585	114,588	24,410	25,768	1,910	..	..	52,088
" 1873.....	6,949	134,276	31,352	112,589	2,916	..	..	146,857
" 1874.....	13,809	168,985	48,126	147,949	1,618	2,356	..	200,044
" 1875.....	17,326	198,608	60,330	193,594	5,373	3,386	..	263,282
" 1876.....	22,254	248,516	78,249	286,614	8,910	5,894	..	379,607
" 1877 (63 weeks).....	24,717	276,522	94,590	299,287	12,631	10,843	634	417,985
" 1878.....	24,379	274,649	103,091	297,636	14,554	12,556	788	418,535
" 1879.....	28,206	305,161	117,657	291,939	16,245	15,127	1,146	442,114
December, 1879 (50 weeks).....	30,688	331,625	130,615	321,670	25,240	15,710	1,095	494,350
" 1880.....	33,663	361,623	146,061	361,805	38,422	17,905	1,661	565,854
" 1881.....	34,351	367,973	156,052	386,824	16,037	18,644	2,489	560,046
" 1882.....	38,643	404,006	171,940	416,382	20,757	19,729	2,945	632,303
" 1883.....	41,783	438,151	186,032	455,379	20,447	21,949	6,214	631,151
" 1884 (53 weeks).....	46,039	459,734	207,080	494,340	25,126	24,324	9,988	761,358
" 1885.....	51,039	507,772	234,112	524,781	31,094	40,084	11,104	841,175
" 1886.....	58,612	558,104	270,579	567,527	37,755	57,015	11,403	944,379
" 1887.....	64,475	604,800	300,953	590,031	39,095	73,237	13,666	1,017,042
" 1888.....	67,704	634,196	318,588	648,134	51,189	84,301	13,928	1,116,035
" 1889 (53 weeks).....	72,399	679,336	342,218	722,321	58,558	119,541	9,197	1,251,665
" 1890.....	92,572	721,316	434,017	824,974	48,549	155,231	11,696	1,474,466

December, 1891	100,022	751,269	479,956	900,762	53,165	193,115	15,409	£	1,636,997
" 1892	112,339	824,149	523,512	925,471	56,301	218,534	17,827	£	1,741,645
" 1893	121,555	875,099	570,149	917,482	85,818	240,884	14,978	£	1,779,301
" 1894	127,211	910,104	598,496	972,686	97,556	259,976	22,488	£	1,891,102
" 1895 (53 weeks)	139,639	930,985	635,541	1,092,070	64,354	282,563	19,050	£	2,093,578
" 1896	142,868	993,564	682,656	1,195,895	97,852	319,478	20,161	£	2,316,042
" 1897	151,682	1,053,564	728,749	1,254,319	109,888	350,747	28,623	£	2,472,321
" 1898	161,720	1,118,158	775,536	1,297,162	152,460	382,620	24,202	£	2,632,000
" 1899	170,993	1,179,609	821,224	1,372,541	199,104	415,690	20,342	£	2,829,501
" 1900	182,810	1,249,091	883,791	1,568,163	257,056	447,390	31,545	£	3,187,945
" 1901 (53 weeks)	196,556	1,315,235	948,944	1,664,765	286,132	477,904	39,304	£	3,416,049
" 1902	203,299	1,392,399	1,006,894	1,701,932	342,152	446,757	4,915	£	3,502,650
" 1903	215,249	1,445,069	1,043,031	1,871,026	327,905	481,866	13,700	£	3,737,548
" 1904	257,424	1,594,145	1,196,703	1,890,352	313,413	516,969	11,739	£	3,929,176
" 1905	270,366	1,635,527	1,307,341	2,192,681	329,995	559,545	9,371	£	4,393,933
" 1906	287,915	1,709,564	1,388,888	2,581,120	375,565	593,363	12,557	£	4,955,943
" 1907 (53 weeks)	303,701	1,768,935	1,476,021	2,867,013	416,872	641,375	15,889	£	5,407,120
" 1908	323,164	1,845,415	1,570,732	3,031,924	477,970	692,547	16,177	£	5,755,750
" 1909	341,631	1,925,517	1,657,305	3,276,733	464,602	742,381	16,395	£	6,161,316
" 1910	355,937	1,991,576	1,740,619	3,491,922	538,984	794,239	10,817	£	6,566,641
" 1911	372,280	2,067,776	1,890,511	4,091,472	617,992	848,609	9,446	£	7,397,430
" 1912 (53 weeks)	392,934	2,160,191	1,916,151	4,507,581	713,203	910,536	8,002	£	8,055,473
" 1913	416,366	2,272,496	2,039,054	5,052,790	811,816	877,479	18,278	£	8,829,417

PROGRESS FROM COMMENCEMENT IN MARCH, 1864, TO DECEMBER, 1913—continued.

YEAR ENDED	Net Sales.	Comparison with corresponding period previous year.		DISTRIBUTIVE EXPENSES.				Net Profit.	Average Dividend paid per £.	ADDITIONS TO TRADE DEPT.		Dates Departments and Branches were commenced.
		Increase.	Rate per cent.	Amount.	Rate on Sales.		Reserve Fund.			Insurance Fund.		
					Per £.	Per £100.						
October, 1864 (30 weeks).....	51,857	£	..	947	d.	s. d.	£	d.	£	£		
1865	120,754	..	..	906	13	4 1/2	1,858	3 1/2	..	..	Tipperary	
1866	175,489	54,735	45 1/2	1,615	15	0	2,310	3	234	..		
1868 (65 weeks).....	331,744	112,688	43	3,185	24	18 4 1/2	4,411	8	450	..	Kilmallock.	
1869	412,240	124,063	51 1/2	3,368	16	2 1/2	4,862	23	416	..	Limerick.	
1870	507,217	159,379	30 1/2	4,644	24	16 5 1/2	4,248	2 1/2	542	..	Newcastle, Bank.	
1871 (53 weeks).....	677,734	159,379	30 1/2	5,558	14	16 5 1/2	7,626	2 1/2	1,620	..	Manchester Boot and Shoe, Crumpsall.	
1872	755,764	86,559	11 1/2	6,853	24	18 0	7,867	2 1/2	1,020	..	London, Armagh, Manchester Drapery,	
1873	1,153,192	394,369	54 1/2	12,811	28	22 2 1/2	11,116	2 1/2	1,248	..	Leicester, Cheshire, Waterford, Clonmel.	
1874	1,636,950	483,818	41 1/2	21,147	3	25 10	14,283	2	922	..	Tralee, Durham.	
1875	1,964,829	327,879	20	28,436	33	28 11 1/2	20,684	2 1/2	4,461	..	Liverpool.	
1876	2,247,595	282,566	14 1/2	31,555	38	28 0 1/2	26,750	2 1/2	4,826	..	New York, Goole, Furnishing. S.S.	
1877 (53 weeks).....	2,697,366	401,095	17 1/2	42,486	92	31 5 1/2	36,979	2 1/2	4,925	..	"Plover" purchased, Cork.	
1878	2,827,052	188,897	7 1/2	43,109	38	30 6 1/2	29,189	2	579	..	Launch of S.S. "Pioneer" Rouen.	
1879	2,705,625	121,427*	4 1/2	43,093	83	31 10 1/2	34,959	2 1/2	5,970	..	Goole Forwarding Depot.	
December, 1879 (50 weeks).....	2,645,831	22,774	0 1/2	41,309	84	51 2 1/2	42,764	2 1/2	8,060	..	Heckmondwike. Purchase of S.S. "Cam-	
1880	3,399,681	611,252	22 1/2	47,153	93	28 2 1/2	42,090	2 1/2	10,651	..	brian," Copenhagen. Purchase of S.S. "Cam-	
1881	3,574,095	234,414	7	51,306	93	28 8 1/2	46,850	2 1/2	7,672	..	Tea and Coffee Department, London.	
1882	4,038,238	464,143	12 1/2	57,340	93	28 4 1/2	49,658	2 1/2	3,416	..	Purchase of S.S. "Unity."	
1883	4,546,889	508,651	12 1/2	66,057	93	29 0 1/2	47,885	2 1/2	3,176	..	Hamburg. Bristol Depot. Launch of S.S. "Progress."	
1884 (53 weeks).....	4,675,371	41,042	0 1/2	70,843	94	30 1	54,491	2 1/2	6,481	..	Longton Depot. Launch of S.S.	
1885	4,793,151	203,946	4 1/2	74,305	93	31 0	77,650	3 1/2	4,454	..	"Federation." Launch of S.S.	
1886	5,223,179	430,028	8 1/2	81,653	93	31 3 1/2	83,328	3 1/2	7,077	..	Batley, Heckmondwike Currying.	
1887	5,713,235	490,056	9 1/2	98,979	93	32 10 1/2	65,141	2 1/2	9,408	..	London Cocoa Department. Launch of S.S. "Equity." Batley Clothing.	
1888	6,200,074	486,839	8 1/2	105,027	4	33 10 1/2	82,490	2 1/2	8,684	..	Launch of S.S. "Liberty." Leeds Clothing.	
1889 (53 weeks).....	7,098,944	709,638	11 1/2	117,849	4	33 6 1/2	101,984	3 1/2	2,949	..		
1890	7,429,078	532,750	7 1/2	126,879	4	34 1 1/2	126,979	3 1/2	..	..		

[illegible]

* Decrease.
† From.
‡ From Disposal of Profit Account.

RESERVE FUND

Dr. TRADE DEPARTMENT FROM

Deductions from Reserve Fund—	£
Subscriptions and Donations to Charitable and other Objects	110,970
Investments Written off: Bank Department	18,259
" " Trade Department	10,660
Insurance Fund	6,000
Land and Buildings Account—Depreciation, Special	1,148
Fixtures " " "	852
Celebration Dinner: Opening Warehouse, Balloon Street	56
Newcastle Formation Expenses	16
21st Anniversary Commemoration Expenses, Manchester	2,017
Jubilee Celebration Expenses	34,699
Expenses incurred in West Africa	3,255
Sprinklers Account—Amount written off to date	74,812
	262,744

RESERVE FUND, December 27th, 1913:—

Investments—

Manchester Ship Canal Company, 2,000 Ordinary Shares of £10 each	£20,000
Gilsland Convalescent Home, 7,500 Shares of £1 each	7,500
British Cotton Growing Association, 5,000 Shares of £1 each	5,000
North-Western Co-operative Convalescent Homes Association	8,000
	40,500

Balance—

As per Balance Sheet, December 27th, 1913	668,110
As per proposed Disposal of Profit Account	97,023
	705,133
	£1,008,377

ACCOUNT.

COMMENCEMENT OF SOCIETY.

Cr.

Additions to Reserve Fund—		£
From Disposal of Profit Account, as per page 221—Net		972,044
Balance—Sale of Properties:—		
Strawberry Estate, Newcastle	£1,953	
Land, Liverpool	713	
Rosedale	11	
South Shields	96	
Newhall	418	
Durham	376	
Gorton	10,923	
Calais	319	
Steamships	10,621	
Tipperary	450	
Land, Shillingstone	100	
		25,980
Balance—Sale of Shares—New Telephone Company		44
„ Share Investment—Lancashire and Yorkshire Productive Society ..		60
„ Sale of part Shares—Co-operative Printing Society		63
„ Share Investment—Leicester Hosiery Society		76
„ „ „ Star and Rochdale Corn Mills		14
„ „ „ Keighley Ironworks		55
Dividend on Debts, previously written off		808
Balances, Shares, Loans, &c., Accounts		232
Bonus to Employés: Differences between Amounts Provided and actually Paid		311
Dividend on Sales to Employés		403
Interest on Manchester Ship Canal Shares		1,515
Transfer from Reserve Balances		6,772
		£1,008,377

SOCIETY LIMITED.

STREET, MANCHESTER.

Act, 1893, 56 and 57 Vict., c. 39.

YEAR ENDED 27th DECEMBER, 1913
(above Act).

EFFECTS. AS AT 27th DECEMBER, 1913.

Trade Department—

	£	s.	d.
Value of Stock in Trade	8,142,334	1	11
Buildings, Fixtures, and Land—(used in trade)	1,469,938	16	0
Four Steamships (used in trade) (<i>Written off</i>)			
INVESTMENTS AND OTHER ASSETS—	£	s.	d.
In Buildings, Fixtures, and Land	592,093	15	10
In Shares of Industrial and Provident Societies	(b) 2,733	4	2
In Shares of Companies	(b) 2,956	3	8
C.W.S. Proportion of Partnership Capital, including Interest and Profits—English and Scottish Wholesale Societies	300,895	2	7
C.W.S. Proportion of Partnership Capital—Co-operative Insurance Society Limited—Consideration Money in respect of Shares Acquired	£107,558	13	7
Less Premium Paid to C.I.S. Shareholders—Written off from Insurance Fund	98,954	13	7
	8,604	0	0
Interest Due	430	4	0
	9,034	4	0
Rents Due	1,836	19	0
Expenses Stock, and Payments in Advance	24,312	6	0
Amount Owing by Members and others at end of Year—Goods and Freights	£1,088,058	4	6
Less Selves Account (<i>see contra</i>)	40,782	12	5
	1,047,275	12	1
Payments in Advance for Goods	50,906	0	4
	2,032,043	7	3

Bank Department—Investments and other Assets.

On Mortgage Security	1,078,329	5	5
On Shares and Loans	80,673	16	7
Promissory Notes	121	7	0
Loan Stock Certificates	252	17	3
Land and Buildings	8,507	0	8
Consols	166,360	12	6
British Corporation Mortgages, Stocks, &c.	3,102,472	2	8
British Railway Debentures and Preference Stocks	90,592	15	11
Foreign and Colonial Bonds	247,449	0	9
Stamped Cheques	189	18	4
Bank Balances	1,492,203	10	0
	6,257,052	6	3
Cash in hand and at Branches:—			
	Trade Dept.	Bank Dept.	
Cash in hand	£11,285	0	0
„ at Branches	17,827	19	7
	£29,112	19	7
	£30,793	10	5
	59,906	10	0

(b) Exclusive of investments made from Reserve Fund (*see a*).

Total £12,961,275 1 5

Secretary—THOS. BRODRICK, Eccles, near Manchester.

Society, and having examined the foregoing General Statement, and verified the same with the be correct, duly vouched, and in accordance with law.

THOS. JAS. BAYLIS, High Street, Rotherham,
T. WOOD, 40 to 46, Deansgate Arcade, Manchester,
C. J. BECKETT, 24, All Saints' Road, St. Annes-on-Sea,
BENJ. TETLOW, 94, Westgate Road, Newcastle-on-Tyne,
J. SMITH, "Wynbury," Orchard Road, Middlesbrough,

ACCOUNTANTS
AND
PUBLIC AUDITORS.

MANCHESTER GROCERY AND PROVISION TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
1 $\frac{1}{2}$ Years,	January, 1876	2,586,691	26,417	0 2 $\frac{3}{8}$	31,028	0 2 $\frac{7}{8}$	56,487
5 "	December, 1880	8,740,658	87,603	0 2 $\frac{3}{8}$	140,043	0 3 $\frac{3}{8}$	70,091
5 "	" 1885	11,723,202	127,892	0 2 $\frac{1}{2}$	157,209	0 3 $\frac{1}{8}$	92,790
5 "	" 1890	15,511,593	180,023	0 2 $\frac{3}{8}$	264,131	0 4	123,432
5 "	" 1895 ...	21,956,461	279,262	0 3	339,816	0 3 $\frac{3}{8}$	159,930
5 "	" 1900	28,186,928	374,568	0 3 $\frac{1}{8}$	500,911	0 4 $\frac{1}{2}$	158,537
5 "	" 1905	41,629,024	489,689	0 2 $\frac{3}{8}$	774,698	0 4 $\frac{3}{8}$	237,874
5 "	" 1910	56,681,416	669,406	0 2 $\frac{3}{8}$	1,134,978	0 4 $\frac{3}{8}$	292,133
Year,	" 1911	12,672,297	157,362	0 2 $\frac{7}{8}$	249,347	0 4 $\frac{5}{8}$	335,733
"	(53 wks) " 1912	13,405,352	163,759	0 2 $\frac{7}{8}$	244,057	0 4 $\frac{1}{2}$	319,102
"	" 1913	13,901,860	164,399	0 2 $\frac{3}{8}$	265,597	0 4 $\frac{1}{2}$	369,537
Half Year, June,	1914 ..	7,042,888	83,126	0 2 $\frac{3}{8}$	148,485	0 5	245,910
40 $\frac{1}{2}$ Years' Total		234,088,370	2,808,506	0 2 $\frac{3}{8}$	4,250,250	0 4 $\frac{1}{2}$	..

MANCHESTER DRAPERY TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
2½ Years, January, 1876		211,351	11,484	1 1	2,165	0 2½	72,408
5 " December, 1880 ...		672,992	43,116	1 3½	* 941	0 0½	44,105
5 " " 1885		771,933	42,919	1 1½	20,277	0 6½	44,948
5 " " 1890		1,205,935	60,656	1 0	25,278	0 5½	84,739
5 " " 1895		1,920,447	100,386	1 0½	48,223	0 6	108,337
5 " " 1900		2,568,623	141,497	1 1½	88,133	0 8½	153,641
5 " " 1905		3,315,793	196,568	1 2½	94,449	0 6½	107,837
5 " " 1910		4,488,109	283,807	1 3½	142,912	0 7½	126,202
Year, " 1911		1,075,460	68,414	1 3¼	33,693	0 7½	125,698
" (53wks) " 1912		1,150,367	71,136	1 2¾	41,017	0 8½	140,549
" " 1913		1,259,157	73,429	1 1⅞	50,333	0 9½	172,631
Half Year, June, 1914		686,562	37,750	1 2⅞	21,771	0 8⅞	184,922
40½ Years' Total		19,276,729	1,181,156	1 2	567,260	..	..
Less Depreciation, October, 1877.....					4,757	..	
Leaves Net Profit					562,503	0 7	

* Loss.

NOTE.—To December, 1883, the figures include Woollens and Ready-Mades Department.

" To June, 1905, inclusive, the figures include Desboro' Corset Factory, } now separately
 " To December, 1906, " " Broughton Shirt " } stated in Prod. Ac/s.

MANCHESTER WOOLLENS AND READY-MADES TRADE.

Since publishing a separate Account in Balance Sheet.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.	
			Amount.	Rate per £.	Amount.	Rate per £.	(a)	(b)
		£	£	s. d.	£	s. d.	£	£
2 Years,	December, 1885 ..	41,578	2,470	1 2½	745	0 4½	5,242	..
5 "	" 1890 ..	120,546	8,331	1 4½	*1,196	0 2½	11,463	..
5 "	" 1895 ..	255,315	15,905	1 2½	*3,232	0 3	15,608	..
5 "	" 1900 ..	622,486	35,706	1 1½	13,805	0 5½	35,978	..
5 "	" 1905 ..	874,585	51,849	1 2½	16,346	0 4½	51,252	16,779
5 "	" 1910 ..	1,190,500	73,678	1 2½	25,475	0 5½	63,211	31,741
Year,	" 1911 ..	252,688	18,693	1 3½	4,569	0 9½	71,082	33,428
" (53 wks)	" 1912 ..	295,112	19,322	1 4	5,508	0 4½	72,219	34,720
"	" 1913 ..	325,775	20,983	1 3½	14,261	0 10½	82,091	47,819
Half Year,	June, 1914 ..	201,372	11,673	1 1½	8,309	0 9½	79,367	48,116
30½ Years' Total....		4,209,957	259,110	1 2½	84,590	0 4½	..	..

* Loss. (a) Woollens and Ready-mades and Outfitting. (b) Linings and Dyed Goods.
NOTE.—To June, 1895, inclusive, the Results and Stocks include Broughton Clothing Factory.

MANCHESTER BOOT AND SHOE TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
2½ Years,	January, 1876	96,648	2,659	0 6½	1,524	0 8½	7,711
5 "	December, 1880	292,347	10,500	0 8½	3,646	0 2½	11,484
5 "	" 1885	439,988	14,708	0 8	6,390	0 3½	16,074
5 "	" 1890	738,251	24,180	0 7½	17,519	0 5½	32,095
5 "	" 1895	1,175,301	48,031	0 9½	18,957	0 3½	56,302
5 "	" 1900	1,493,428	59,448	0 9½	30,468	0 4½	62,178
5 "	" 1905	1,859,595	70,983	0 9½	31,162	0 4	63,144
5 "	" 1910	2,299,318	91,335	0 9½	37,121	0 3½	80,190
Year,	" 1911 ..	469,916	21,392	0 10½	5,173	0 2½	85,715
" (53 wks)	" 1912 ..	528,862	22,600	0 10½	8,776	0 3½	88,509
"	" 1913	538,661	23,068	0 10½	9,546	0 4½	99,361
Half Year,	June, 1914	319,602	12,130	0 9	7,063	0 5½	103,845
40½ Years' Total		10,251,917	401,029	0 9½	177,235	0 4½	..

MANCHESTER FURNISHING TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end. (a)
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
4½ Years,	December, 1880	81,886	4,999	1 2½	617	0 1½	4,307
5	" " 1885	184,218	9,354	1 0½	2,379	0 3	5,817
5	" " 1890	439,580	21,250	0 11½	6,408	0 3½	12,930
5½	" " 1895	781,803	41,130	1 0½	6,587	0 2	19,574
5	" " 1900	1,317,554	65,372	0 11½	23,638	0 4½	27,817
5	" " 1905	1,639,436	80,885	0 11½	22,300	0 9½	28,388
5½	" " 1910	2,030,974	105,126	1 0½	23,367	0 2½	31,664
Year,	" 1911	471,296	23,215	1 2½	2,029	0 1	32,739
" (53 wks)	" 1912	499,051	30,795	1 2½	2,019	0 0½	34,937
"	" 1913	566,713	31,026	1 1½	3,774	0 3½	41,246
Half Year,	June, 1914	305,086	16,057	1 0½	4,244	0 8½	45,244
36 Years' Total		8,317,097	434,209	1 0½	102,362	0 2½	..

NOTE.—From March, 1893, to June, 1895, inclusive, the Results and Stocks include Broughton Cabinet Works.

(a) Excludes Longton Stock. MEMO.—In Balance Sheet Longton Stocks included with Manchester Furnishing Stocks.

NEWCASTLE BRANCH GROCERY AND PROVISION TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
5 Years, December, 1880		2,562,396	38,033	0 8½	23,708	0 2½	44,398
5 " " 1885		4,237,286	53,274	0 8	55,386	0 8½	53,546
5 " " 1890		5,217,881	70,760	0 8½	93,880	0 4½	42,136
5 " " 1895		7,761,473	104,141	0 8½	155,711	0 4½	46,719
5 " " 1900		10,795,105	169,596	0 8½	185,269	0 4	87,591
5 " " 1905		14,933,269	210,120	0 8½	182,098	0 2½	74,788
5 " " 1910		17,219,332	253,841	0 8½	306,286	0 4½	115,499
Year, " 1911		3,711,452	54,939	0 8½	81,944	0 5½	138,373
" (53 wks) " 1912		3,825,892	57,169	0 8½	71,579	0 4½	137,296
" " 1913		4,040,879	59,125	0 8½	66,211	0 8½	148,091
Half Year, June, 1914		2,010,859	29,300	0 8½	32,050	0 8½	123,945
38½ Years' Total		76,335,874	1,105,348	0 8½	1,254,062	0 8½	..

NOTE.—To December, 1903, the figures include Pelaw Printing, now separately
stated in Productive Accounts.

NEWCASTLE BRANCH DRAPERY TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
5 Years, December, 1890		234,269	10,745	0 11	5,484	0 5½	16,171
5 " " 1885		513,938	17,599	0 8½	21,903	0 10½	24,084
5 " " 1890		876,923	30,548	0 8½	37,968	0 10½	33,216
5 " " 1895		1,351,804	44,684	0 7½	57,256	0 10½	48,361
5 " " 1900		1,864,292	71,047	0 9½	84,856	0 10½	63,704
5 " " 1905		2,259,678	123,128	1 0½	64,195	0 6½	59,939
5 " " 1910		2,698,979	156,830	1 1½	68,669	0 6	58,798
Year, " 1911		589,604	91,264	1 1½	15,030	0 6	57,536
" (53 wks) " 1912		592,005	35,523	1 2½	16,098	0 6½	57,042
" " 1913		684,483	38,890	1 1½	19,963	0 6½	55,179
Half Year, June, 1914		352,471	20,402	1 1½	9,005	0 6½	62,233
38½ Years' Total		12,018,446	582,660	0 11½	400,427	0 7½	..

NOTE.—To June, 1898, the figures include Woollens and Ready-Mades Department.

" To December, 1903, the figures include Pelaw Shirt Factory, now shown in Productive Accounts with Pelaw Tailoring and Kersey Factories.

NEWCASTLE BRANCH WOOLLENS AND READY-MADES TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
2½ Years, December, 1900		339,631	10,361	0 7½	16,984	1 0	35,627
5 " " 1905		719,657	32,340	0 10½	24,408	0 8½	32,054
5 " " 1910		829,638	39,934	0 11½	35,272	0 10½	36,310
Year, " 1911		181,689	9,974	0 11½	6,763	0 8½	39,327
" (53 wks) " 1912		187,422	9,080	0 11½	8,669	0 11	39,843
" " 1913		207,380	9,976	0 11½	8,779	0 10½	44,942
Half Year, June, 1914		120,610	5,461	0 10½	4,861	0 9½	41,386
16 Years' Total		2,585,977	116,126	0 10½	105,786	0 9½	..

NOTE.—To December, 1903, the figures include Pelaw Tailoring and Kersey Factories, now shown in Productive Accounts with Pelaw Shirt Factory.

NEWCASTLE BRANCH BOOT AND SHOE TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
5 Years, December, 1880		144,855	4,500	0 7½	2,412	0 4	5,971
5 " " 1885		327,150	9,980	0 7½	8,276	0 6	11,319
5 " " 1890		493,126	18,876	0 9½	7,874	0 3½	11,870
5 " " 1895		648,897	22,443	0 8½	14,020	0 5½	20,680
5 " " 1900		893,524	31,452	0 8½	21,199	0 5½	26,770
5 " " 1905		1,179,581	47,466	0 9½	18,082	0 3½	29,423
5 " " 1910		1,291,610	51,780	0 9½	23,550	0 4½	33,298
Year, " 1911		253,922	10,787	0 10½	4,245	0 4	33,346
" (53 wks) " 1912		263,912	10,844	0 9½	3,073	0 2½	45,992
" " 1913		262,569	10,888	0 9½	4,811	0 4½	43,587
Half Year, June, 1914		150,545	5,568	0 8½	2,860	0 4½	41,649
38½ Years' Total		5,909,651	224,579	0 9	110,402	0 4½	..

NOTE.—To December, 1888, the figures include Furnishing Department.

NEWCASTLE BRANCH FURNISHING TRADE.

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
2 Years, December, 1890		138,487	6,287	0 10½	2,387	0 4½	10,474
5 " " 1895		485,907	26,707	1 1½	6,233	0 8	16,120
5 " " 1900		963,098	47,272	0 11½	24,066	0 5½	29,796
5 " " 1905		1,285,488	76,223	1 2½	11,688	0 2½	28,555
5 " " 1910		1,411,869	100,024	1 5	30,075	0 5	32,852
Year, " 1911		293,895	21,493	1 5½	5,333	0 4½	32,119
" (53 wks) " 1912		288,076	21,628	1 6	4,879	0 4	34,471
" " 1913		354,333	23,361	1 3½	7,558	0 5	35,104
Half Year, June, 1914		199,169	12,048	1 2½	6,184	0 7½	40,379
21½ Years' Total		5,420,862	394,988	1 2½	98,803	0 4½	..

NOTE.—To December, 1903, the figures incl de Pelaw Cabinet Factory, now separately stated in Productive Accounts.

LONDON BRANCH GROCERY AND PROVISION TRADE

(INCLUDING BRISTOL, CARDIFF, AND NORTHAMPTON DEPOTS).

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
1½ Years,	January, 1876	203,137	3,907	0 4½	2,151	0 2½	7,219
5	„ December, 1880	1,119,233	17,326	0 3½	17,683	0 3½	20,789
5	„ „ 1885	1,746,107	29,470	0 4	24,718	0 3½	24,256
5	„ „ 1890	3,661,913	66,023	0 4¼	51,270	0 3¼	57,347
5	„ „ 1895	6,125,158	125,071	0 4½	74,567	0 2½	45,828
5	„ „ 1900	8,924,536	188,854	0 5	187,122	0 3½	109,468
5	„ „ 1905	15,225,894	247,770	0 3½	221,376	0 3½	129,171
5	„ „ 1910	20,980,393	324,279	0 3½	354,070	0 4	183,194
Year,	„ 1911	4,890,468	76,215	0 3½	94,010	0 4½	191,004
„ (53 wks)	„ 1912	5,513,340	79,758	0 3½	99,527	0 4½	213,268
„	„ 1913	5,750,722	79,796	0 3¼	103,402	0 4½	210,022
Half Year,	June, 1914	2,974,784	40,941	0 3½	56,160	0 4½	204,050
40½ Years' Total	.....	77,115,685	1,279,410	0 8½	1,236,061	0 3½	..

LONDON BRANCH DRAPERY TRADE

(INCLUDING BRISTOL DEPOT).

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
Half Year, December, 1880		8,157	812	0 9½	86	0 1	8,805
5 Years, " 1885		209,909	11,677	1 1½	1,963	0 2½	11,502
5 " " 1890		368,681	28,327	1 6½	*5,789	0 3½	12,607
5 " " 1895		439,003	33,431	1 6½	515	0 0½	21,859
5 " " 1900		693,385	55,546	1 7½	9,992	0 3½	45,685
5 " " 1905		989,710	80,375	1 7½	10,986	0 2½	44,749
5 " " 1910		1,349,170	120,082	1 9½	13,755	0 2½	64,686
Year, " 1911		372,985	31,694	1 8½	6,392	0 4	62,378
" (53 weeks) " 1912		405,121	33,012	1 7½	9,752	0 5½	69,685
" " 1913		455,943	34,604	1 6½	14,603	0 7½	75,624
Half Year, June, 1914		245,077	18,717	1 6½	6,897	0 6½	84,277
34 Years' Total		5,537,141	447,777	1 7½	69,102	0 2½	..

* Loss.

NOTE.—The above figures include the following: Boots and Shoes to September, 1887; Furnishing to March, 1889; Woollens and Ready-mades to March, 1898.

LONDON BRANCH WOOLLENS AND READY-MADES TRADE

(INCLUDING BRISTOL DEPOT).

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.		NET PROFIT.		Stocks at end.
			Amount.	Rate per £.	Amount.	Rate per £.	
		£	£	s. d.	£	s. d.	£
2½ Years, December, 1900		96,037	9,128	1 10½	2,054	0 5½	14,908
5 " " 1905		300,139	28,237	1 10½	4,901	0 3½	21,602
5 " " 1910		408,825	44,532	2 2½	*237	0 0½	27,110
Year, " 1911		100,165	10,600	2 1½	*472	0 1½	27,391
" (53 weeks) " 1912		110,538	11,104	2 0	519	0 1½	29,671
" " 1913		128,848	12,004	1 10½	1,377	0 3½	40,040
Half Year, June, 1914		74,067	6,551	1 9½	880	0 2½	40,951
16½ Years' Total		1,216,619	122,206	2 0	9,522	0 1½	..

* Loss.

LONDON BRANCH BOOT & SHOE TRADE

(INCLUDING BRISTOL DEPOT).

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.			NET PROFIT.		NET LOSS.		Stocks at end.
			Amo't.	Rate per £.		Amo't.	Rate per £.	Amo't.	Rate per £.	
		£	£	s. d.		£	s. d.	£	s. d.	£
3½ Years,	December, 1890 ..	105,438	5,640	1 0½		152	0 0½	..	..	6,051
5	" " 1895 ..	242,974	15,350	1 3½		..	..	1,013	0 1	11,182
5	" " 1900 ..	376,424	24,274	1 3¾		2,064	0 1½	..	..	20,287
5	" " 1905 ..	596,359	34,976	1 2		4,919	0 1½	..	..	24,120
5	" " 1910 ..	818,189	58,145	1 5		..	..	6,361	0 1½	45,515
Year,	" 1911 ..	179,818	13,247	1 5½		..	..	3,455	0 4½	42,629
"	(53 wks) " 1912 ..	208,224	13,858	1 3½		..	..	1,278	0 1½	48,340
"	" 1913 ..	229,297	13,558	1 2½		75	..	..	..	52,501
Half Year,	June, 1914 ..	135,708	7,146	1 0½		250	0 0½	..	..	52,515
26½ Years' Total....		2,892,431	186,189	1 3¾		7,460	..	12,107	..	..
Less Profit.....						..	..	7,460	..	..
Leaves Net Loss.....						..	..	4,647	0 0½	..

LONDON BRANCH FURNISHING TRADE

(INCLUDING BRISTOL DEPOT).

Since keeping a separate Account.

PERIOD.	ENDED.	Sales.	EXPENSES.			NET PROFIT.		NET LOSS.		Stocks at end.
			Amo't.	Rate per £.		Amo't.	Rate per £.	Amo't.	Rate per £.	
		£	£	s. d.		£	s. d.	£	s. d.	£
1½ Years,	December, 1890 ..	53,957	4,487	1 7½		..	..	952	0 4½	3,957
5	" " 1895 ..	208,925	17,814	1 8¾		..	..	1,655	0 1½	8,604
5	" " 1900 ..	370,518	29,067	1 6½		..	..	160	..	12,854
5	" " 1905 ..	490,048	40,071	1 7½		2,536	0 1½	..	..	14,136
5	" " 1910 ..	617,399	54,554	1 9½		4,286	0 1½	..	..	14,251
Year,	" 1911 ..	153,827	13,118	1 8¾		3,000	0 4½	..	..	14,297
"	(53 wks) " 1912 ..	165,216	13,911	1 8¾		2,359	0 3¾	..	..	14,945
"	" 1913 ..	189,545	14,565	1 6¾		3,931	0 4¾	..	..	16,213
Half Year,	June, 1914 ..	103,057	7,611	1 5½		2,171	0 5	..	..	18,718
25½ Years' Total....		2,352,492	195,198	1 7¾		18,283	..	2,767	..	..
Less Loss						2,767	..			
Leaves Net Profit						15,516	0 1½			

CRUMPSALL BISCUITS, CAKES,

Since keeping

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
2½ Years, January, 1876.....		29,840	29,394	5,309	707	953	6,969
5 " December, 1880.....		87,218	87,003	14,589	2,427	2,298	19,314
5 " " 1885.....		106,679	106,959	18,014	3,194	2,122	23,330
5 " " 1890.....		177,924	181,173	35,716	6,308	4,022	46,046
5 " " 1895.....		421,775	426,085	78,418	10,340	8,048	91,806
5 " " 1900.....		464,581	443,116	101,908	13,412	6,020	121,340
5 " " 1905.....		799,152	791,129	188,173	21,110	12,793	222,075
5 " " 1910.....		986,711	922,477	209,931	23,515	13,305	246,751
Year, " 1911.....		207,694	204,879	50,645	3,966	1,940	56,551
" (53 wks) " 1912.....		218,597	208,518	50,886	3,999	2,088	56,923
" " 1913.....		200,464	196,809	54,215	4,120	1,725	60,060
Half Year, June, 1914.....		106,247	105,062	29,889	2,060	839	32,788
40½ Years' Total		3,751,877	3,702,554	832,692	95,158	56,103	983,953

NOTE.—Dry Soap and Preserves transferred to Irlam
Dried Sweets transferred to Silvertown,
Drugs and Sundries transferred to Pelaw

SWEETS, AND JELLIES WORKS.

a separate Account.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRODUCTION.		Amount.	Rate per £ on Sup- plies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
2½ Years, January, 1876		23 14 2½	4 8½	955	0 7½	1,538
5 " December, 1880		22 3 11½	4 5½	4,649	1 0½	1,798
5 " " 1885		21 16 2½	4 4½	7,987	1 5½	3,534
5 " " 1890		25 8 3½	5 0½	1,027	0 1½	12,712
5 " " 1895		21 10 11½	4 3½	23,500	1 1½	28,905
5 " " 1900		27 7 8	5 5½	24,157	1 0½	14,018
5 " " 1905		28 1 4½	5 7½	57,882	1 5½	14,631
5 " " 1910		26 14 11½	5 4½	80,280	1 8½	9,907
Year, " 1911		27 12 0½	5 6½	21,042	2 0½	15,516
" (53 wks) " 1912		27 5 11½	5 5½	13,287	1 2½	10,192
" " 1913		30 10 4	6 1½	15,802	1 6½	11,313
Half Year, June, 1914		31 4 1½	6 2½	10,558	1 11½	11,177
40½ Years' Total		26 11 5½	5 3½	260,576	1 4½	..

and Middleton respectively, September, 1896.

December, 1906.

and Silvertown respectively, December, 1912.

MIDDLETON PRESERVE, PEEL,

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
4½ Years,	December, 1900	608,218	639,903	82,018	12,740	11,254	106,012
5 "	" " 1905	1,214,080	1,229,847	184,015	17,728	20,507	172,250
5 "	" " 1910	1,547,884	1,572,759	205,853	29,761	31,125	266,739
Year,	" " 1911	404,163	400,893	53,887	9,397	8,174	71,458
" (53 weeks)	" " 1912	420,339	477,243	57,208	9,514	8,886	75,608
"	" " 1913	449,294	424,399	61,488	9,514	8,644	79,641
Half Year,	June, 1914	223,640	188,314	33,969	4,757	3,963	42,689
18 Years' Total		4,867,618	4,933,358	628,433	93,411	92,553	814,397

IRLAM SOAP, CANDLE, LARD,

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
20 Weeks,	December, 1895	26,999	32,391	3,597	807	656	5,060
5 Years,	" " 1900	908,258	904,415	104,511	19,765	15,343	139,619
5 "	" " 1905	1,875,031	1,852,601	201,734	29,576	24,813	256,123
5 "	" " 1910	3,604,606	3,391,499	312,980	44,873	30,961	388,819
Year,	" " 1911	620,965	610,157	71,658	6,280	4,962	82,900
" (53 wks)	" " 1912	658,186	647,350	84,072	6,380	5,451	95,903
"	" " 1913	770,689	752,602	91,859	6,975	5,535	104,369
Half Year,	June, 1914	412,105	405,545	53,556	3,681	3,111	60,348
18 Years and 11 Mo. Total.		8,876,739	8,596,660	923,967	118,342	90,832	1,133,141

NOTE.—Durham Soap Works business commenced January, 1873; sold March, 1896, when trade was transferred to Irlam.

AND PICKLE WORKS TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRO- DUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
4½ Years,	December, 1900.....	16 11 4	3 3½	24,328	0 9½	66,044
5 "	" 1905.....	14 0 1½	2 9½	85,898	0 6½	99,938
5 "	" 1910.....	16 19 2½	3 4½	76,277	0 11½	137,851
Year,	" 1911.....	17 16 5½	3 6½	15,871	0 9½	180,098
", (53 weeks)	" 1912.....	15 16 10½	3 2	11,994	0 6½	181,949
"	" 1913.....	18 15 3½	3 9	13,290	0 7	165,158
Half Year,	June, 1914.....	22 13 4½	4 6½	9,962	0 10½	134,773
18 Years' Total.....		16 10 1½	3 3½	186,615	0 9½	..

AND STARCH WORKS TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end. (a)
		RATE ON PRODUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
20 Weeks, December, 1895.....		15 12 5½	3 1½	369	0 3½	30,825
5 Years, " 1900.....		15 8 8½	3 1	40,319	0 10½	74,059
5 " " 1905.....		13 16 6	2 9½	83,518	0 10½	125,435
5 " " 1910.....		11 9 3½	2 3½	136,168	0 9	83,435
Year, " 1911.....		13 11 8¾	2 8½	16,237	0 6½	91,884
" (53 wks) " 1912.....		14 16 3½	2 11½	13,905	0 5	106,580
" " 1913.....		13 17 4½	2 9½	17,184	0 5½	132,514
Half Year, June, 1914.....		14 17 7½	2 11½	10,116	0 5½	107,777
18 Years and 11 Months' Total..		13 3 7½	2 7½	317,816	0 8½	..

(a) Includes Sydney Works.

SILVERTOWN SOAP

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
2 Years & 29 Wks., Dec., 1910 ..		370,607	381,553	36,522	3,766	7,278	52,566
Year,	" 1911 ..	192,009	199,467	16,924	3,588	2,770	23,282
" (53 weeks)	" 1912 ..	195,916	191,147	20,647	3,463	2,585	26,695
"	" 1913 ..	234,713	229,485	24,778	3,559	2,242	30,578
Half Year,	June, 1914 ..	113,392	108,256	13,577	1,777	1,219	16,573
6 Years and 3 Weeks' Total		1,106,637	1,109,908	112,448	21,152	16,094	149,694

DUNSTON SOAP

From

PERIOD.	ENDED.	Net Supplies.	Pro- duction.	EXPENSES.			
				Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
1 Year & 46 Wks., Dec., 1910 ..		205,444	212,981	18,784	4,631	3,771	27,186
Year,	" 1911 ..	156,245	158,706	13,566	2,557	1,802	17,925
" (53 weeks)	" 1912 ..	155,498	154,130	14,402	2,942	1,806	18,550
"	" 1913 ..	193,022	188,720	22,236	2,614	1,890	26,740
Half Year,	June, 1914 ..	86,050	87,328	10,646	1,375	1,079	13,100
5 Years and 19 Weeks' Total		796,259	801,865	79,634	13,519	10,348	103,501

WORKS TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRODUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
2 Years & 29 Weeks, Dec., 1910		18 15 6 ³ / ₈	2 9	17,176	0 11	34,547
Year,	" 1911	11 13 5 ¹ / ₂	2 4	5,407	0 6 ³ / ₄	42,750
" (53 weeks)	" 1912	18 19 3 ³ / ₄	2 9 ¹ / ₂	6,157	0 7 ¹ / ₂	33,988
"	" 1913	18 6 5 ⁷ / ₈	2 7 ⁷ / ₈	10,881	0 11 ¹ / ₈	44,640
Half Year,	June, 1914	15 6 2 ¹ / ₈	3 0 ⁵ / ₈	5,024	0 10 ³ / ₈	27,047
6 Years and 3 Weeks' Total		18 9 8 ⁷ / ₈	2 8 ¹ / ₂	44,645	0 9 ³ / ₈	..

WORKS TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRODUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
1 Year & 45 Weeks, December, 1910 . . .		12 15 3 ³ / ₈	2 6 ³ / ₈	14,376	1 4 ³ / ₄	23,236
Year,	" 1911 . . .	11 5 10 ⁵ / ₈	2 3	8,593	1 1 ¹ / ₈	21,223
" (53 weeks)	" 1912 . . .	12 0 8 ³ / ₈	2 4 ⁷ / ₈	8,022	1 0 ³ / ₈	25,713
"	" 1913 . . .	14 3 4 ¹ / ₂	2 10	11,209	1 1 ⁷ / ₈	32,657
Half Year,	June, 1914 . . .	15 0 0 ¹ / ₈	3 0	4,785	1 1 ¹ / ₄	28,118
5 Years and 19 Weeks' Total . . .		12 18 1 ³ / ₄	2 6 ⁷ / ₈	46,985	1 2 ¹ / ₈	..

DUNSTON FLOUR

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
4 Years & 36 Weeks, Dec., 1895		1,521,168	1,502,636	86,159	29,715	23,219	139,093
5 "	" 1900	2,772,171	2,732,924	139,138	33,810	19,647	192,595
5 "	" 1905	3,330,419	3,252,957	163,484	81,470	22,002	216,956
5 "	" 1910	3,927,284	3,877,005	187,590	46,304	46,879	280,773
Year,	" 1911	765,052	769,472	46,871	9,097	7,639	63,597
" (53 weeks)	" 1912	854,824	851,306	43,029	9,133	8,488	60,650
"	1913	909,123	904,821	46,166	9,135	7,863	62,165
Half Year,	June, 1914	420,815	380,797	25,153	4,568	4,405	34,126
23 Years & 10 Weeks' Total..		14,500,861	14,271,918	736,590	173,223	140,142	1,049,955

MILL TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		NET LOSS.		Stocks at end.
		RATE ON PRO- DUCTION.						
		Per cent.	Per £.	Amo'nt.	Rate per £ on Sup- plies.	Amo'nt.	Rate per £ on Sup- plies.	
		£ s. d.	s. d.	£	s. d.	£	s. d.	£
4 Years & 36 Weeks, Dec., 1895....		9 5 1½	1 10½	..	..	31,884	0 5	71,974
5 "	" 1900....	7 0 11½	1 4½	20,952	0 1½	..	..	54,476
5 "	" 1905....	6 18 4½	1 4	84,917	0 2½	..	..	181,541
5 "	" 1910....	7 4 10	1 5½	82,587	0 1½	..	..	105,840
Year,	" 1911....	8 5 8½	1 7½	11,549	0 8½	..	..	164,498
" (53 weeks)	" 1912....	7 2 5½	1 5	11,107	0 8	..	..	182,376
"	" 1913 ...	6 17 4½	1 4½	8,852	0 2½	..	..	182,179
Half Year,	June, 1914....	8 19 2½	1 9½	3,163	0 1½	..	..	151,893
23 Years & 10 Weeks' Total..		7 7 1½	1 5½	122,577	..	31,884	..	..
Less Loss				31,884	..	..	..	
Leaves Net Profit..				90,693	0 1½	..	..	

SILVERTOWN FLOUR

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Depre- ciation.	Interest.	Total.
		£	£	£	£	£	£
Half Year, December, 1900.....		62,476	61,569	5,524	1,804	1,118	8,446
5 Years, " 1905.....		1,802,999	1,771,744	92,095	25,371	17,720	135,186
5 " " 1910.....		2,809,909	2,760,514	117,596	39,474	30,427	187,497
Year, " 1911.....		466,874	417,180	23,396	8,109	4,989	36,444
" (53 weeks) " 1912.....		548,720	548,723	26,126	7,680	5,155	38,961
" " 1913.....		572,628	564,570	25,337	7,781	4,752	37,820
Half Year, June, 1914.....		310,093	295,884	12,984	1,794	2,397	17,175
14 Years' Total		6,572,599	6,420,184	303,058	91,963	66,508	461,529

MANCHESTER SUN FLOUR

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
4 Years & 34 Weeks, Dec., 1910		3,213,133	3,141,508	106,557	33,720	28,189	168,466
Year, " 1911		914,196	894,453	84,715	10,099	6,873	51,687
" (53 weeks) " 1912		1,073,127	1,098,990	40,077	10,102	5,670	55,849
" " 1913		1,047,696	1,023,552	47,164	10,102	4,993	62,259
Half Year, June, 1914		570,053	571,371	24,361	6,130	3,769	34,260
8 Years and 8 Weeks' Total		6,818,145	6,669,814	252,874	70,153	49,494	372,521

MILL TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		RESULT OF WORKING.			Stocks at end.
		RATE ON PRODUCTION.		Profit.	Loss.	Rate per £ on Supplies.	
		Per cent.	Per £.				
Half Year, December, 1900	....	£ s. d. 13 14 4½	s. d. 2 8½	£ ..	£ 4,381	s. d. 1 4½	£ 18,538
5 Years,	" 1905	7 12 7½	1 6½	10,962	..	0 1½	31,712
5 "	" 1910	6 15 10	1 4½	..	24,389	0 2	52,189
Year,	" 1911	8 14 8½	1 8½	6,353	..	0 3½	42,282
" (53 weeks)	" 1912	7 2 0	1 5	2,132	..	0 0½	96,680
"	" 1913	6 13 11½	1 4	..	6,510	0 2½	106,508
Half Year, June,	1914	5 16 1	1 1½	1,677	..	0 1½	52,118
14 Years' Total	.....	7 3 9½	1 5½	..	14,156	0 0½	..

AND PROVENDER MILL TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET RESULT.		Stocks at end.
		RATE ON PRODUCTION.		Profit.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
4 Years & 34 Weeks, December, 1910 ..		5 7 3	1 0½	15,507	0 1½	63,894
Year,	" 1911 ..	5 15 6½	1 1½	17,562	0 4½	60,784
" (53 weeks)	" 1912 ..	5 7 6½	1 0½	25,959	0 5½	23,861
"	" 1913 ..	6 1 7½	1 2½	21,248	0 4½	61,171
Half Year,	June, 1914 ..	5 19 11	1 2½	6,880	0 2½	73,679
8 Years & 8 Weeks' Total.....		5 11 8½	1 1½	87,156	0 3	..

OLDHAM STAR FLOUR

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
4 Years & 38 Weeks, Dec., 1910 ..		1,728,272	1,712,548	69,450	18,880	16,189	104,519
Year, December, 1911		867,265	356,691	18,418	4,089	3,017	25,519
„ 1912 (53 weeks) ..		416,190	411,926	18,314	4,085	2,673	25,022
„ „ 1913		395,668	395,555	20,981	3,978	2,309	27,268
Half Year, June, 1914		193,653	188,351	9,974	1,989	1,070	13,033
8 Years and 12 Weeks' Total		3,100,988	3,055,071	187,132	32,971	25,258	195,361

NOTE.—Rochdale Flour Mill acquired January, 1906; closed June, 1907, when trade was transferred to Oldham Star Mill.

AVONMOUTH FLOUR AND

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
34 Weeks, December, 1910		232,241	227,688	9,126	2,953	4,369	16,448
Year, December, 1911 ..		427,217	393,606	15,462	5,028	6,055	26,545
„ „ 1912 (53 weeks) ..		522,403	470,742	17,585	5,156	5,873	28,614
„ „ 1913		556,420	499,220	17,487	5,158	6,176	28,821
Half Year, June, 1914		281,994	247,423	8,525	2,648	2,954	14,127
4 Years and Weeks' Total..		2,020,275	1,838,679	68,185	20,943	25,427	114,555

MILL TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET RESULT.		Stocks at end.
		RATE ON PRODUCTION.		Profit.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
4 Years & 38 Weeks, Dec., 1910		6 2 0½	1 2½	12,061	0 1½	31,196
Year, December, 1911.....		7 8 1	1 5½	4,073	0 2½	52,088
„ „ 1912 (53 weeks)		6 1 5½	1 2½	8,115	0 4½	25,881
„ „ 1913		6 17 10½	4½	3,986	0 2½	28,077
Half Year, June, 1914		6 18 4½	1 4½	1,737	0 2½	16,664
8 Years & 12 Weeks' Total.....		6 7 5½	1 8½	29,972	0 2½	..

PROVENDER MILL TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET RESULT.			Stocks at end.
		RATE ON PRODUCTION.		Profit.	Loss.	Rate per £ on Supplies.	
		Per cent.	Per £.				
		£ s. d.	s. d.	£	£	s. d.	£
34 Weeks, December, 1910	....	7 4 5½	1 5½	..	11,438	0 11½	119,915
Year, Dec., 1911	.....	6 14 10½	1 4½	6,522	..	0 3½	155,961
" "	1912 (53 weeks)	6 1 6½	1 2½	9,133	..	0 4½	137,753
" "	1913	5 15 5½	1 1½	3,465	..	0 1½	147,842
Half Year, June, 1914	.....	5 14 2½	1 1½	2,288	..	0 1½	97,998
4 Years & 8 Weeks' Total.		6 4 7½	1 2½	9,970	..	0 1½	..

MANCHESTER TOBACCO

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2 Years and 28½ Weeks, Dec., 1900		436,841	32,199	1,944	3,069	37,212
5 " " 1905		1,846,976	111,441	7,380	11,907	130,728
5 " " 1910		2,900,605	159,075	12,544	19,862	191,481
Year, " 1911		702,611	37,055	2,888	4,183	44,126
" (53 weeks) " 1912		730,327	39,829	2,924	4,689	47,442
" " 1913		726,091	41,166	2,955	4,692	48,813
Half Year, June, 1914		366,896	21,310	1,512	2,680	25,502
16 Years and 2½ Weeks' Total....		7,710,847	442,075	32,147	51,082	525,904

WEST HARTLEPOOL LARD REFINERY

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
4 Years and 37 Wks., Dec., 1900		374,595	12,475	3,690	3,298	19,463
5 " " 1905		652,804	16,279	4,588	3,708	24,575
5 " " 1910		626,581	14,610	5,338	3,785	23,733
Year, " 1911		109,527	2,846	1,082	767	4,695
" (53 weeks) " 1912		127,460	3,038	845	560	4,443
" " 1913		140,148	2,795	378	457	3,630
Half Year, June, 1914		68,497	1,378	189	276	1,843
18 Years and 11 Weeks' Total..		2,099,562	53,421	16,110	12,851	82,382

NOTE.—Egg Department closed June, 1904.

FACTORY TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
2 Years and 28½ Weeks, December, 1900		6,488	0 3½	14,502
5 " " 1905		35,326	0 4½	77,749
5 " " 1910		14,121	0 1½	75,331
Year, " 1911		2,915	0 0½	93,935
" (53 weeks) " 1912		3,691	0 1½	108,889
" " 1913		1,024	0 0½	128,457
Half Year, June, 1914		196	..	127,530
16 Years and 2½ Weeks' Total		63,701	0 1½	..

AND EGG WAREHOUSE TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
4 Years and 37 Weeks, December, 1900		7,496	0 4½	14,053
5 " " 1905		10,418	0 3½	6,279
5 " " 1910		11,389	0 4½	11,960
Year, " 1911		298	0 0½	8,655
" (53 weeks) " 1912		4,595	0 8½	4,031
" " 1913		4,330	0 7½	15,843
Half Year, June, 1914		886	0 1½	8,963
18 Years and 11 Weeks' Total		38,907	0 4½	..

LONGSIGHT PRINTING

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
47 Weeks, December, 1895.....		7,512	3,391	591	415	4,397
5 Years, " 1900.....		177,885	79,927	10,957	5,531	96,415
5 " " 1905.....		429,902	187,020	21,830	11,188	220,038
5 " " 1910.....		641,046	285,554	30,076	14,889	330,519
Year, " 1911.....		158,844	69,928	6,290	2,943	79,161
" (53 wks) " 1912.....		160,300	75,379	6,303	2,789	84,471
" " 1913.....		175,533	78,934	6,344	2,561	87,839
Half Year, June, 1914.....		94,927	43,504	2,724	1,325	47,553
19 Years and 5 Months' Total.....		1,845,949	823,637	85,115	41,641	950,393

LEICESTER PRINTING

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
1 Year & 39 Weeks, December, 1910		27,412	10,296	1,282	724	12,302
Year, " 1911		21,041	8,284	758	409	9,451
" (53 wks) " 1912		22,977	8,750	689	355	9,744
" " 1913		27,549	11,136	684	352	12,172
Half Year, June, 1914		15,878	6,278	684	389	7,351
5½ Years' Total		114,857	44,744	4,047	2,229	51,020

WORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
47 Weeks, December, 1895.....		475	1 8½	1,089
5 Years, " 1900.....		6,798	0 9½	11,818
5 " " 1905.....		18,369	0 7½	18,695
5 " " 1910.....		18,952	0 7	29,251
Year, " 1911.....		4,886	0 7½	30,569
" (53 wks) " 1912.....		1,943	0 27½	32,187
" " 1913.....		4,921	0 6½	34,956
Half Year, June, 1914.....		1,137	0 27½	32,941
19 Years and 3 Months' Total		52,481	0 6½	..

WORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
1 Year & 39 Weeks, December, 1910		967	0 8½	2,826
Year, " 1911		570	0 6½	3,346
" (53 wks) " 1912		1,489	1 3	4,621
" " 1913		621	0 5½	4,909
Half Year, June, 1914		313	0 4½	5,509
3½ Years' Total.....		3,910	0 8½	..

PELAW PRINTING

Since publishing a separate

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2 Years, December, 1905		15,530	6,634	1,143	700	8,477
5 " " 1910		62,735	27,508	4,044	1,562	33,414
Year, " 1911		21,390	8,535	1,458	624	10,617
" (53 wks) " 1912		21,411	9,214	1,415	600	11,229
" " 1913		26,785	10,746	1,375	546	12,667
Half Year, June, 1914		13,899	6,203	699	296	7,198
10½ Years' Total		161,750	68,840	10,134	4,628	83,602

LITTLEBOROUGH FLANNEL

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2½ Years, December, 1900.....		56,517	12,098	1,515	952	14,560
5 " " 1905.....		100,878	28,098	2,287	2,547	32,932
5 " " 1910.....		118,709	29,959	1,900	2,611	34,470
Year, " 1911.....		25,495	6,141	380	528	7,049
" (53 wks) " 1912.....		26,417	6,271	380	517	7,168
" " 1913.....		25,756	6,262	380	510	7,152
Half Year, June, 1914.....		9,722	3,244	190	300	3,734
16½ Years' Total		368,494	92,068	7,082	7,965	107,065

WORKS TRADE.

Account in Balance Sheet.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
2 Years, December, 1905		588	0 8½	315
5 " " 1910		1,208	0 4½	3,150
Year, " 1911		663	0 7½	3,147
" (53 wks) " 1912		481	0 5½	3,119
" " 1913		790	0	3,892
Half Year, June, 1914		42	0 0½	4,313
10½ Years' Total		3,722	0 5½	..

MILL TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
2½ Years, December, 1900.....		13	..	7,992
5 " " 1905.....		400	0 0½	7,693
5 " " 1910.....		4,730	0 9½	10,089
Year, " 1911..		996	0 9½	10,158
" (53 weeks) " 1912.....		1,739	1 3½	11,215
" " 1913.....		870	0 8	12,911
Half Year, June, 1914.....		57	0 1½	20,178
16½ Years' Total		8,805	0 5½	....

HUTHWAITE HOSIERY

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Depre- ciation.	Interest.	Total.
		£	£	£	£	£
2½ Years,	December, 1905	168,815	44,581	5,120	4,559	54,260
5 "	" 1910	365,805	102,696	11,996	12,364	127,056
Year,	" 1911	107,290	24,358	2,559	2,762	29,679
"	(53 weeks) " 1912	126,958	30,816	2,920	2,952	36,688
"	" 1913	158,813	35,905	3,197	2,924	41,926
Half Year, June,	1914	72,296	19,512	1,689	1,581	22,782
11 Years' Total		998,977	257,768	27,481	27,143	312,391

NOTE.—Business transferred from Leicester to Huthwaite June, 1908.

DESBORO' CORSET

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
Half Year, December, 1905		5,142	2,286	56	181	2,473
5 Years,	" 1910	115,418	43,433	5,269	3,911	52,613
Year,	" 1911	34,208	11,237	1,105	785	13,127
"	(53 weeks) " 1912	34,103	11,840	1,129	790	13,759
"	" 1913	37,569	12,187	1,134	714	14,035
Half Year, June,	1914	23,161	6,703	572	366	7,641
9 Years' Total		249,601	87,686	9,265	6,697	103,648

FACTORY TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
2½ Years,	December, 1905	255	0 0½	..	..	26,549
5 "	" 1910	..	..	40,198	2 2½	49,919
Year,	" 1911	2,868	0 5½	..	..	47,805
" (53 weeks)	" 1912	4,037	0 7½	..	..	55,548
"	" 1913	2,498	0 8½	..	..	59,438
Half Year, June,	1914	990	0 8	..	..	75,254
11 Years' Total		10,088	..	40,198	..	....
Less Profit		..	..	10,088	..	
Leaves Net Loss		..	..	30,110	0 7½	

FACTORY TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
Half Year, December, 1905		..	..	494	1 10½	7,558
5 Years,	" 1910	..	..	8,069	0 6½	11,887
Year,	" 1911	1,034	0 7½	..	..	11,844
" (53 weeks)	" 1912	1,124	0 7½	..	..	12,987
"	" 1913	1,163	0 7½	..	..	11,525
Half Year, June,	1914	1,340	1 1½	..	..	10,765
9 Years' Total		4,661	..	3,553	..	..
Less Loss.....		3,553	..	..	..	
Leaves Net Profit.....		1,108	0 1	..	..	

BROUGHTON SHIRT

Since publishing a separate

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Depre- ciation.	Interest.	Total.
		£	£	£	£	£
4 Years, December, 1910		316,938	69,831	3,994	4,449	78,274
Year, " 1911		102,092	21,523	902	975	23,400
" (53 wks) " 1912		125,477	26,218	980	980	28,128
" " 1913		140,406	30,166	1,160	1,242	32,568
Half Year, June, 1914		70,469	15,712	630	669	17,011
7½ Years' Total		755,882	163,450	7,616	8,315	179,381

BATLEY WOOLLEN

From

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
4 Years, December, 1890		44,326	47,618	20,973	1,124	1,607	23,704
5 " " 1895		95,265	94,954	31,188	2,289	1,990	35,367
5 " " 1900		183,887	183,125	48,641	4,394	2,808	55,843
5 " " 1905		245,026	245,771	71,871	8,374	4,566	84,811
5 " " 1910		256,059	264,100	81,869	8,729	6,201	96,799
Year, " 1911		55,786	57,686	17,959	1,924	1,358	21,236
" (53 wks) " 1912		51,384	53,562	17,523	1,924	1,327	20,774
" " 1913		59,334	60,905	18,366	1,955	1,260	22,181
Half Year, June, 1914		34,466	31,734	9,673	989	663	11,325
27½ Years' Total		1,025,033	1,039,455	318,613	31,652	21,775	372,040

FACTORY TRADE.

Account in Balance Sheet.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
4 Years, December, 1910		..	..	12	..	23,251
Year, " 1911		854	0 2	..	..	14,684
" (53 wks) " 1912		2,537	0 4½	..	..	26,906
" " 1913		1,687	0 2½	..	..	24,925
Half Year, June, 1914		2,070	0 7	..	..	32,686
7½ Years' Total.....		7,148	..	12	..	..
Less Loss.....		12	..	..	..	
Leaves Net Profit.....		7,136	0 2½	..	..	

MILL TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRO- DUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
4 Years, December, 1890		49 15 7	9 11½	*6796	3 0½	7,326
5 " " 1895		37 4 11½	7 5½	3,089	0 7½	8,139
5 " " 1900		30 9 10½	6 1½	7,648	0 10	10,904
5 " " 1905		34 10 1½	6 10½	7,244	0 7	12,886
5 " " 1910		36 13 0½	7 3½	5,946	0 5½	17,589
Year, " 1911		36 16 3½	7 4½	1,881	0 8	17,850
" (53 wks) " 1912		38 15 8½	7 9	1,867	0 6½	21,614
" " 1913		36 8 4½	7 3½	1,801	0 5½	23,964
Half Year, June, 1914		35 13 8½	7 1½	1,018	0 7	20,263
27½ Years' Total.....		35 15 10	7 1½	22,648	0 5½	..

* Loss.

BURY WEAVING

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
37 Weeks, December, 1905		27,620	7,668	1,223	823	9,714
5 Years, " 1910		410,746	89,517	12,145	8,177	109,839
Year, " 1911		114,534	21,690	2,577	1,961	26,228
" (53 wks) " 1912		111,957	20,016	2,664	1,641	24,321
" " 1913		109,909	22,015	2,724	1,387	26,126
Half Year, June, 1914		58,588	11,597	1,362	727	13,686
9 Years and 11 Weeks' Total..		898,354	172,503	22,695	14,716	209,914

RADCLIFFE WEAVING

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
20 Weeks, December, 1912		981	1,100	120	66	1,286
Year, " 1913		17,470	6,779	947	611	8,337
Half Year, June, 1914		21,907	4,923	652	443	6,018
1 Year and 46 Weeks' Total..		40,358	12,802	1,719	1,120	15,641

SLED TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
37 Weeks, December, 1905		..	..	650	0 5 $\frac{1}{2}$	6,129
5 Years, " 1910		1,937	0 1 $\frac{1}{8}$	..	..	31,918
Year, " 1911		188	0 0 $\frac{3}{8}$	..	..	34,784
" (53 wks) " 1912		1,155	0 2 $\frac{3}{8}$	..	..	21,458
" " 1913		1,473	0 3 $\frac{1}{8}$	..	..	22,537
Half Year, June, 1914		984	0 4	..	..	24,126
9 Years and 11 Weeks' Total..		5,737	..	650	..	..
Less Loss.....		650	..			
Leaves Net Profit.....		5,087	0 1 $\frac{3}{8}$			

SLED TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
20 Weeks, December, 1912		..	..	587	..	4,208
Year, " 1913		..	..	3,056	3 5 $\frac{1}{2}$	12,066
Half Year, June, 1914		40	0 0 $\frac{3}{8}$	..	..	18,971
1 Year and 46 Weeks' Total..		40	..	3,643	..	..
Less Profit.....				40	..	
Leaves Net Loss.....				3,603	1 9 $\frac{3}{8}$	

LEEDS CLOTHING

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2½ Years, December, 1890.....		10,652	6,414	149	128	6,691
5 " " 1895.....		97,978	53,712	903	760	55,975
5 " " 1900.....		198,863	109,204	2,639	1,740	113,583
5 " " 1905.....		251,014	137,633	5,365	2,938	145,941
5 " " 1910.....		288,718	164,333	4,973	3,113	172,424
Year, " 1911.....		65,239	39,361	1,242	823	41,426
" (53 wks) " 1912.....		71,975	39,663	1,326	832	41,321
" " 1913.....		83,806	50,154	2,323	1,233	53,760
Half Year, June, 1914.....		52,450	28,752	1,000	724	30,476
25½ Years' Total		1,120,695	629,231	19,925	12,341	661,497

BROUGHTON CLOTHING

Since publishing a separate

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
Half Year, December, 1895.....		7,561	4,920	171	106	5,197
5 Years, " 1900.....		146,319	96,238	3,671	2,252	102,161
5 " " 1905.....		204,787	127,974	5,630	3,245	136,849
5 " " 1910.....		215,743	132,239	5,860	3,124	141,223
Year, " 1911.....		51,365	33,019	805	630	34,454
" (53 wks) " 1912.....		52,441	35,690	821	704	37,215
" " 1913.....		53,150	35,149	936	730	36,815
Half Year, June, 1914.....		34,501	18,713	507	436	19,656
19 Years' Total		770,867	483,942	13,401	11,227	513,570

FACTORY TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
2½ Years, December, 1890.....		..	..	1,125	2 1½	1,816
5 " " 1895.....		5,668	1 17½	..	..	5,276
5 " " 1900.....		13,728	1 4½	..	..	9,764
5 " " 1905.....		10,949	0 10½	..	..	8,860
5 " " 1910.....		8,528	0 7	..	..	9,743
Year, " 1911.....		1,445	0 5½	..	..	15,482
" (53 wks) " 1912.....		868	0 27½	..	..	10,860
" " 1913.....		417	0 1½	..	..	15,515
Half Year, June, 1914.....		28	0 0½	..	..	13,405
25½ Years' Total		41,626	..	1,125	..	..
Less Loss		1,125	..			
Leaves Net Profit		40,501	0 8½			

FACTORY TRADE.

Account in the Balance Sheet.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
Half Year, December, 1895.....		254	0 8	..	..	1,003
5 Years, " 1900.....		..	..	1,677	0 2½	5,453
5 " " 1905.....		6,695	0 7½	..	..	3,306
5 " " 1910.....		12,895	1 1½	..	..	4,505
Year, " 1911.....		692	0 8½	..	..	6,597
" (53 wks) " 1912.....		..	..	425	0 17½	8,203
" " 1913.....		1,201	0 4½	..	..	10,326
Half Year, June, 1914.....		203	0 1½	..	..	8,709
19 Years' Total		21,920	..	2,102	..	..
Less Loss		2,102	..			
Leaves Net Profit		19,218	0 57½			

LEICESTER BOOT AND

Since keeping

PERIOD.	ENDED.	Net Supplies.	Produc- tion.	EXPENSES.			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
2½ Years, January,	1876.....	86,565	97,576	28,264	166	914	29,344
5 ,, December,	1880.....	369,357	362,821	127,772	1,947	4,987	134,706
5 ,, ,,	1885.....	495,321	493,020	182,021	3,369	5,822	191,212
5 ,, ,,	1890.....	771,134	783,457	291,291	5,724	7,622	304,637
5 ,, ,,	1895.....	1,264,427	1,269,859	495,923	19,269	23,491	538,683
5 ,, ,,	1900.....	1,560,965	1,546,483	593,400	27,815	24,566	645,781
3 ,, ,,	1905.....	1,812,821	1,781,627	687,119	25,134	23,234	735,487
5 ,, ,,	1910.....	1,884,286	1,823,798	662,930	14,279	25,712	702,921
Year, ,,	1911.....	374,882	363,281	132,790	662	4,514	137,966
,, (58 wks) ,,	1912.....	428,531	412,209	140,555	494	4,163	145,212
,, ,,	1913.....	384,045	369,697	128,886	677	4,434	133,997
Half Year, June,	1914.....	265,535	244,520	77,984	344	2,089	80,367
40½ Years' Total	.....	9,647,869	9,543,298	3,548,885	99,880	131,548	3,780,313

SHOE WORKS TRADE.

a separate Account.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRODUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
2½ Years, January,	1876	80 1 5½	6 0½	1,488	0 4½	9,186
5 ,,	December, 1880	37 2 6½	7 5	4,008	0 2½	15,772
5 ,,	" 1885	38 15 8	7 9	8,630	0 4½	15,752
5 ,,	" 1890	38 17 8	7 9½	35,946	0 11½	61,935
5 ,,	" 1895	42 8 4½	8 5½	24,347	0 4½	101,621
5 ,,	" 1900	41 15 1½	8 4½	27,905	0 4½	114,013
5 ,,	" 1905	41 5 7½	8 3	15,617	0 2	114,216
5 ,,	" 1910	38 10 9½	7 8½	40,084	0 5½	140,462
Year,	" 1911	37 19 7½	7 7½	6,179	0 3½	153,244
,, (53 weeks)	" 1912	35 4 6½	7 0½	7,577	0 4½	146,289
,,	" 1913	36 4 10½	7 2½	3,805	0 2	135,804
Half Year, June,	1914	32 17 4½	6 6½	5,991	0 5½	107,924
40½ Years' Total	.....	39 11 9½	7 11	181,077	0 4½	..

HECKMONDWIKE BOOT, SHOE,

From

PERIOD.	ENDED.	Net Supplies.	Boot and Shoe Production.	TOTAL EXPENSES (INCLUDING CURRYING DEPARTMENT).			
				Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£	£
Half Year, December, 1880.....		3,060	3,438	1,057	16	30	1,103
5 Years,	1885.....	83,295	85,197	27,824	461	1,038	29,323
5 "	1890.....	189,007	117,020	44,559	2,389	2,857	49,785
5 "	1895.....	229,350	192,594	78,872	4,552	5,408	88,832
5 "	1900.....	280,601	238,078	100,647	8,605	6,104	115,356
5 "	1905.....	342,878	307,637	115,788	10,183	6,161	132,132
5 "	1910.....	357,796	333,333	115,619	3,416	4,652	123,687
Year,	1911.....	84,141	80,470	27,853	14	878	28,745
" (53 weeks)	1912.....	105,738	103,790	34,194	14	1,152	35,360
"	1913.....	115,202	113,305	38,398	1,515	2,175	42,088
Half Year, June,	1914.....	59,314	65,632	20,028	795	1,200	22,023
34 Years' Total.....		1,800,382	1,645,494	604,819	31,960	31,655	668,434

RUSHDEN BOOT AND

From

PERIOD.	ENDED.	Net Supplies.	Production.	EXPENSES.			
				Wages & Sundry.	Depre- ciation.	Interest.	Total.
		£	£	£	£	£	£
31 Weeks, December, 1900		11,091	11,806	4,215	68	83	4,366
5 Years,	1905	285,920	295,640	84,225	5,191	3,867	93,288
5 "	1910	544,361	559,668	153,740	9,439	8,656	171,835
Year,	1911	88,997	76,017	23,688	2,515	2,035	28,188
" (53 weeks)	1912	89,798	94,848	27,777	2,769	1,915	32,461
"	1913	98,015	99,622	27,439	2,808	1,907	32,154
Half Year, June,	1914	57,138	53,686	16,147	1,412	976	18,535
14 Years and 5 Weeks' Total..		1,175,318	1,191,287	337,181	24,202	19,439	380,822

AND CURRYING WORKS TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.				NET PROFIT.		NET LOSS.		Stocks at end.
		BOOT & SHOE RATE ON PRODUCTION.		Per cent.	Per £.	Amo't.	Rate per £ on Supplies.	Amo't.	Rate per £ on Supplies.	
		£ s. d.	s. d.							
Half Year, December, 1880..		32 1 7 ³ / ₄	6 4 ⁷ / ₈	..	..	..	..	181	1 2 ⁵ / ₈	2,473
5 Years,		1885..	34 8 4 ¹ / ₂	6 10 ¹ / ₂	71	0 0 ¹ / ₈	..	..	..	5,314
5 "	"	1890..	35 16 1 ¹ / ₂	7 17 ³ / ₈	4,953	0 8 ³ / ₈	..	..	..	11,325
5 "	"	1895..	38 2 1 ¹ / ₂	7 7 ³ / ₈	9,416	0 9 ³ / ₄	..	..	..	20,711
5 "	"	1900..	40 18 2 ³ / ₈	8 2 ³ / ₈	..	..	..	2,273	0 1 ⁷ / ₈	15,437
5 "	"	1905..	37 19 3 ³ / ₈	7 7	6,074	0 4 ¹ / ₂	..	..	..	12,985
5 "	"	1910..	33 6 0 ³ / ₈	6 7 ³ / ₈	..	..	..	2,294	0 1 ¹ / ₂	17,985
Year,		1911..	33 3 8 ³ / ₈	6 7 ³ / ₈	616	0 1 ³ / ₈	..	..	..	22,784
" (53 weeks)	"	1912..	31 17 3 ³ / ₈	6 4 ³ / ₈	1,364	0 3	..	..	..	38,794
"	"	1913..	33 12 6 ³ / ₈	6 8 ³ / ₈	487	0 0 ⁷ / ₈	..	..	..	47,679
Half Year, June,		1914..	31 19 3 ³ / ₈	6 4 ³ / ₈	406	0 1 ⁵ / ₈	..	..	..	61,450
34 Years' Total		35 19 10 ³ / ₈	7 2 ¹ / ₂	23,367	..	..	..	4,748	..	..
		Less Loss		4,748	..	..				
		Leaves Net Profit..		18,619	0 2 ³ / ₈					

SHOE WORKS TRADE.

commencement.

PERIOD.	ENDED.	EXPENSES.		NET PROFIT.		Stocks at end.
		RATE ON PRODUCTION.		Amount.	Rate per £ on Supplies.	
		Per cent.	Per £.			
		£ s. d.	s. d.	£	s. d.	£
31 Weeks, December, 1900		36 19 7 ³ / ₈	7 4 ³ / ₂	964	1 8 ³ / ₄	2,482
5 Years,	1905	31 11 0 ³ / ₈	6 3 ³ / ₈	22,070	1 6 ¹ / ₂	20,549
5 "	1910	30 14 0 ³ / ₈	6 1 ³ / ₈	27,992	1 0	38,338
Year,	1911	37 1 7 ³ / ₈	7 4 ⁷ / ₈	369	0 0 ⁷ / ₈	25,076
" (53 weeks)	1912	34 4 5 ³ / ₂	6 10 ³ / ₈	716	0 1 ⁷ / ₈	28,592
"	1913	32 5 6	6 5 ³ / ₈	720	0 1 ³ / ₂	34,376
Half Year, June,	1914	34 10 5 ³ / ₈	6 10 ³ / ₂	331	0 1 ³ / ₈	33,993
14 Years and 5 Weeks' Total....		31 19 4 ³ / ₈	6 4 ³ / ₈	52,562	0 10 ³ / ₈	..

BROUGHTON CABINET

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
3½ Years, December, 1895		22,423	15,442	1,216	1,826	17,984
5 " " 1900		65,846	39,217	2,414	2,524	44,155
5 " " 1905		69,879	36,847	2,921	2,863	42,181
5 " " 1910		141,485	69,372	3,608	3,257	76,237
Year, "		32,136	15,806	690	741	17,297
" (53 wks) " 1912		30,442	15,529	80	480	16,089
" " 1913		36,616	17,907	86	476	18,469
Half Year, June, 1914		18,135	9,333	45	264	9,542
21½ Years' Total		416,912	219,353	11,060	11,481	241,844

LEEDS BRUSH

Since publishing a separate

PERIOD.	ENDED	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
1½ Years, December, 1905		16,814	7,530	307	341	8,178
5 " " 1910		109,505	45,569	3,272	2,544	51,385
Year, " 1911		32,047	12,880	915	705	14,500
" (53 wks) " 1912		38,498	13,439	955	678	15,072
" " 1913		36,669	14,918	960	579	16,457
Half Year, June, 1914		20,624	8,618	484	301	9,403
10 Years' Total		249,157	102,954	6,893	5,143	114,995

NOTE.—Huddersfield business transferred to Leeds, June, 1906.

WORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
3½ Years, December, 1895		..	..	1,905	1 1¼	7,257
5 " " 1900		..	..	5,950	1 9½	4,452
5 " " 1905		..	..	492	0 1½	7,584
5 " " 1910		1,547	0 2½	..	..	9,853
Year, 1911		201	0 1½	..	..	10,917
" (53 wks) " 1912		189	0 1	..	..	12,133
" " 1913		188	0 1½	..	..	12,797
Half Year, June, 1914		103	0 1½	..	..	14,767
21½ Years' Total		2,178	..	7,687	..	..
Less Profit.....				2,178	..	
Leaves Net Loss....				5,509	0 3½	

FACTORY TRADE.

Account in Balance Sheet.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
1½ Years, December, 1905		565	0 8	4,453
5 " " 1910		3,907	0 8½	11,358
Year, " 1911		1,003	0 7½	10,971
" (53 wks) " 1912		878	0 6½	10,277
" " 1913		293	0 1½	9,267
Half Year, June, 1914		206	0 2½	10,560
10 Years' Total.....		6,847	0 6½	..

KEIGHLEY

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2½ Years, December, 1910		40,970	17,167	1,418	1,186	19,721
Year, " 1911		19,712	8,283	551	435	9,269
" (53 wks) " 1912		23,397	9,840	562	419	10,321
" " 1913		29,536	11,082	574	420	12,076
Half Year, June, 1914		15,776	5,712	287	202	6,201
6 Years' Total		129,991	51,584	3,392	2,612	57,588

DUDLEY BUCKET AND

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2½ Years, December, 1910		61,120	24,717	1,189	954	26,860
Year, " 1911		25,546	9,839	440	391	10,670
" (53 wks) " 1912		27,749	10,402	440	373	11,220
" " 1913		31,570	11,347	440	343	12,130
Half Year, June, 1914		17,188	6,500	220	169	6,889
6 Years' Total		163,123	62,805	2,729	2,235	67,769

IRONWORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
2½ Years, December, 1910		898	0 5½	4,699
Year, " 1911		805	0 9½	4,651
" (53 wks) " 1912		901	0 9½	5,887
" " 1913		1,598	1 0½	5,939
Half Year, June, 1914		1,604	2 0½	6,204
6 Years' Total		5,806	0 10¾	..

FENDER WORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
2½ Years, December, 1910		2,149	0 8½	3,849
Year, " 1911		688	0 6½	4,069
" (53 wks) " 1912		1,256	0 10¾	4,736
" " 1913		2,561	1 7½	4,542
Half Year, June, 1914		1,137	1 3½	4,454
6 Years' Total		7,786	0 11½	..

BIRTLEY TINPLATE

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2½ Years, December, 1910		16,745	8,476	742	542	9,760
Year, " 1911		7,118	8,016	214	172	8,402
" (53 wks) " 1912		7,489	8,078	212	151	8,486
" " 1913		7,386	8,291	212	184	8,687
Half Year, June, 1914		8,512	1,664	106	68	1,888
6 Years' Total		42,150	19,520	1,486	1,067	22,073

ROCHDALE PAINT, &c.,

From

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
42 Weeks, December, 1912		5,156	1,991	264	206	2,461
Year, " 1913		9,748	2,759	386	360	3,505
Half Year, June, 1914		6,765	1,365	..	96	1,461
2 Years and 18 Weeks' Total		21,664	6,115	650	662	7,427

WORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		Stocks at end.
		Amount.	Rate per £ on Supplies.	
		£	s. d.	£
2½ Years, December, 1910		575	0 8½	2,647
Year, " 1911		523	1 5½	2,246
" (53 wks) " 1912		532	1 5½	1,920
" " 1913		429	1 2	1,642
Half Year, June, 1914		241	1 4½	1,829
6 Years' Total		2,900	1 1	..

WORKS TRADE.

commencement.

PERIOD.	ENDED.	NET PROFIT.		NET LOSS.		Stocks at end.
		Amount.	Rate per £ on Supplies.	Amount.	Rate per £ on Supplies.	
		£	s. d.	£	s. d.	£
42 Weeks, December, 1912		..	..	757	2 11½	6,438
Year, " 1913		..	..	3,602	..	6,369
Half Year, June, 1914		239	0 8½	..	..	4,755
2 Years and 15 Weeks' Total		239	..	4,359	..	..
		Less Profit.....		239	..	
		Leaves Net Loss		4,120.	..	

PELAW TAILORING, KERSEY,

Since publishing a separate

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages & Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2 Years, December, 1905		65,992	20,918	2,371	1,398	24,687
5 " " 1910		209,084	62,147	5,292	3,540	70,979
Year, " 1911		46,455	14,198	1,083	810	16,091
" (53 wks) " 1912		47,965	14,989	1,036	766	16,791
" " 1913		52,342	15,912	988	647	17,547
Half Year, June, 1914		28,842	9,223	501	350	10,074
10½ Years' Total		450,680	137,387	11,271	7,511	156,169

PELAW CABINET

Since publishing a separate

PERIOD.	ENDED.	Net Supplies.	EXPENSES.			
			Wages and Sundry.	Deprecia- tion.	Interest.	Total.
		£	£	£	£	£
2 Years, December, 1905		52,223	31,659	3,912	2,434	38,005
5 " " 1910		152,676	78,509	5,339	4,377	88,225
Year, " 1911		32,721	16,776	123	337	17,236
" (53 wks) " 1912		34,204	17,604	123	403	18,130
" " 1913		46,714	22,681	107	468	23,256
Half Year, June, 1914		24,956	12,600	70	253	12,923
10½ Years' Total		348,494	179,329	9,674	8,272	197,775

AND SHIRT FACTORIES TRADE.

Account in Balance Sheet.

PERIOD. ENDED.	NET PROFIT.		Stocks at end.
	Amount.	Rate per £ on Supplies.	
	£	s. d.	£
2 Years, December, 1905	725	0 2 $\frac{1}{2}$	5,606
5 " " 1910	8,194	0 9 $\frac{3}{8}$	9,411
Year, " 1911	932	0 4 $\frac{3}{4}$	11,219
" (53 wks) " 1912	793	0 3 $\frac{7}{8}$	8,112
" " 1913	1,459	0 6 $\frac{5}{8}$	9,491
Half Year, June, 1914	532	0 4 $\frac{3}{8}$	8,995
10 $\frac{1}{2}$ Years' Total	12,635	0 6 $\frac{3}{8}$	..

WORKS TRADE.

Account in Balance Sheet.

PERIOD. ENDED.	RESULT OF WORKING.			Stocks at end.
	Profit.	Loss.	Rate per £ on Supplies.	
	£	£	s. d.	£
2 Years, December, 1905	..	1,814	0 8 $\frac{1}{2}$	9,877
5 " " 1910	..	12,117	1 7	8,520
Year, " 1911	287	..	0 2	10,480
" (53 wks) " 1912	121	..	0 0 $\frac{1}{2}$	12,211
" " 1913	608	..	0 3	13,331
Half Year, June, 1914	208	..	0 2	15,472
10 $\frac{1}{2}$ Years' Total	..	12,707	0 8 $\frac{1}{8}$	..

DISTRIBUTIVE EXPENSES AND RATE PER CENT. ON

	GRAND TOTAL.		
	£29,691,320.		
	Amount.	Rate per £100.	
SALES=			
Expenses=			
	£ s. d.	s. d.	
Wages.....	300323 6 0	20 2	76
Auditors.....	999 5 9	0 0	81
Scrutineers	81 12 11	0 0	03
Committees	10768 7 11	0 8	70
Price Lists: Printing	7979 16 0	0 6	45
" Postage.....	757 0 4	0 0	61
Printing and Stationery	15645 9 11	1 0	65
Periodicals	382 12 11	0 0	81
Travelling.....	38893 9 9	2 7	44
Stamps	10327 6 7	0 8	35
Telegrams.....	680 19 2	0 0	51
Telephones	2267 1 2	0 1	83
Miscellaneous	2674 9 1	0 2	16
Advertisements and Showcards	6783 13 11	0 5	44
"Wheatsheaf" Record	11868 6 11	0 9	59
Rents, Rates, and Taxes.....	15024 3 7	1 0	14
Power, Water, Lighting, and Heating	8476 11 7	0 6	85
Exhibition and Congress	2104 9 6	0 1	70
Quarterly Meetings	1250 7 3	0 1	01
Employés' Picnic	400 9 0	0 0	32
Legal	119 2 4	0 0	10
"Annual," 1913.....	924 17 10	0 0	75
Dining-rooms	25595 11 6	1 8	69
Repairs, Renewals, &c.....	19764 3 5	1 3	98
National Health, &c., Insurance	1772 17 11	0 1	43
Insurance	5680 19 10	0 4	59
Depreciation: Land.....	6546 18 6	0 5	29
" Buildings.....	21971 7 1	1 5	76
" Fixtures, &c.	9338 19 10	0 7	55
Interest	88971 11 7	5 11	92
Totals.....	618220 9 1	41 7	72

SALES FOR THE YEAR ENDED DECEMBER 27TH, 1913.

SUMMARY OF DISTRICT TOTALS.

MANCHESTER.			NEWCASTLE.			LONDON.		
£17,021,192.			£5,670,321.			£6,999,807.		
Amount.	Rate per £100.		Amount.	Rate per £100.		Amount.	Rate per £100.	
£ s. d.	s. d.		£ s. d.	s. d.		£ s. d.	s. d.	
151015 5 3	17 8-93		73065 12 9	25 9-25		76242 8 0	21 9-41	
589 14 5	0 0-76		216 15 5	0 0-92		242 15 11	0 0-88	
18 1 6	0 0-03		5 19 0	0 0-03		7 12 5	0 0-03	
5439 1 6	0 7-67		2994 19 7	1 0-68		2329 6 10	0 7-99	
4833 4 11	0 6-81		1169 4 9	0 4-95		1977 6 4	0 6-78	
507 10 11	0 0-72		57 16 5	0 0-24		191 13 0	0 0-66	
8299 8 6	0 11-70		3305 7 0	1 1-99		4040 14 5	1 1-85	
203 4 11	0 0-29		81 13 2	0 0-34		97 14 10	0 0-34	
19217 3 2	2 3-10		7429 14 4	2 7-45		12246 12 3	3 5-99	
5337 5 7	0 7-53		2643 18 5	0 11-19		2346 2 7	0 8-04	
303 19 10	0 0-43		261 7 5	0 1-11		65 11 11	0 0-23	
1063 3 10	0 1-50		412 15 5	0 1-75		791 1 11	0 2-71	
1557 12 10	0 2-20		587 12 0	0 2-49		529 4 3	0 1-82	
4060 0 2	0 5-72		1148 11 7	0 4-86		1525 2 2	0 5-23	
6781 17 4	0 9-56		2228 5 8	0 9-43		2858 3 11	0 9-80	
7039 6 6	0 9-93		3696 18 0	1 3-65		4287 19 1	1 2-70	
4672 10 1	0 6-59		1857 14 0	0 7-86		1946 7 6	0 6-67	
1566 19 8	0 2-21		244 10 9	0 1-03		292 19 1	0 1-00	
835 2 7	0 1-18		61 11 2	0 0-26		353 13 6	0 1-21	
238 3 0	0 0-33		62 2 0	0 0-26		100 4 0	0 0-34	
16 6 8	0 0-02		10 15 5	0 0-04		92 0 3	0 0-32	
528 4 3	0 0-74		173 18 0	0 0-74		222 15 7	0 0-76	
14462 16 2	1 3-39		6063 4 6	2 1-66		5069 10 10	1 5-38	
10446 11 3	1 2-73		4429 5 6	1 6-75		4888 6 8	1 4-76	
927 3 7	0 1-31		410 7 1	0 1-74		435 7 3	0 1-49	
2512 7 8	0 3-54		1452 11 10	0 6-15		1716 0 4	0 5-88	
4346 3 8	0 6-13		1245 9 8	0 5-27		955 5 2	0 3-28	
9473 12 11	1 1-36		6399 14 9	2 3-09		6092 19 5	1 3-89	
5494 9 6	0 7-75		1791 14 5	0 7-58		2052 15 11	0 7-04	
45637 13 1	5 4-35		19671 9 6	6 11-26		23662 9 0	6 9-13	
317379 5 3	37 3-51		143180 19 6	50 6-02		157660 4 4	45 0-53	

DISTRIBUTIVE EXPENSES AND RATE PER CENT. ON

MANCHESTER.

SALES =	MANCHESTER.									
	TOTALS.				GROCERY.				COAL.	
	£17,021,192.				£13,901,860.				£429,026.	
Expenses =	Amount.		Rate per £100.		Amount.		Rate per £100.		Amount.	Rate per £100.
	£	s. d.	s. d.		£	s. d.	s. d.		£	s. d.
Wages	151015	5 3	17 8 93		72933	11 4	10 5 91		1797	7 1
Auditors	539	14 5	0 0 76		375	0 6	0 0 65		8	13 5
Scrutineers	18	1 6	0 0 03		14	14 6	0 0 03		0	9 4
Committees	5439	1 6	0 7 67		2929	16 10	0 5 06		51	0 5
Price Lists: Printing....	4833	4 11	0 6 81		2230	14 2	0 3 85		....	....
" Postage	507	10 11	0 0 72		446	0 11	0 0 77		....	....
Printing and Stationery..	8299	8 6	0 11 70		4682	15 9	0 8 08		229	2 4
Periodicals	203	4 11	0 0 29		158	1 8	0 0 27		4	2 9
Travelling	19217	3 2	2 3 10		7569	13 1	1 1 07		489	19 4
Stamps	5397	5 7	0 7 53		4263	15 1	0 7 36		132	9 6
Telegrams	303	19 10	0 0 43		208	7 2	0 0 36		6	7 6
Telephones	1063	3 10	0 1 50		839	13 6	0 1 45		26	0 6
Miscellaneous	1557	12 10	0 2 20		1081	19 2	0 1 87		23	13 0
Adverts. and Showcards..	4060	0 2	0 5 72		3145	18 8	0 5 43		63	2 1
"Wheatsheaf" Record ..	6781	17 4	0 9 56		5530	15 2	0 9 55		175	0 0
Rents, Rates, and Taxes..	7039	6 6	0 9 93		3055	15 7	0 5 28		29	3 0
Power, Water, Lighting, and Heating	4672	10 1	0 6 59		1325	11 3	0 2 29		42	11 4
Exhibition and Congress	1566	19 8	0 2 21		1065	19 6	0 1 84		30	4 1
Quarterly Meetings	385	2 7	0 1 18		681	4 0	0 1 18		21	10 8
Employés' Picnic	238	3 0	0 0 33		95	14 7	0 0 17		0	4 9
Legal	16	6 8	0 0 02		14	10 7	0 0 02		0	1 0
"Annual," 1913	528	4 3	0 0 74		429	19 8	0 0 74		13	16 3
Dining-rooms	14462	16 2	1 3 39		9884	6 3	1 5 07		204	18 4
Repairs, Renewals, &c. ..	10446	11 3	1 2 73		6722	3 10	0 11 60		538	14 6
National Health, &c., Insurance	927	3 7	0 1 81		433	15 1	0 0 84		12	12 9
Insurance	2512	7 8	0 3 54		1208	0 10	0 2 09		4	2 0
Depreciation: Land	4346	3 8	0 6 13		1740	9 10	0 3 00		19	13 1
" Buildings..	9478	12 11	1 1 36		3706	10 11	0 6 40		42	13 5
" Fixtures, &c.	5494	9 6	0 7 75		2760	16 9	0 4 76		47	16 4
Interest	45637	13 1	5 4 35		24813	1 5	3 6 33		453	19 0
Totals	317379	5 3	37 3 51		164398	17 7	23 7 82		4474	12 9
										20 10 31

SALES FOR THE YEAR ENDED DEC. 27TH, 1913—continued.

MANCHESTER.

DRAPERY.		WOOLLENS AND READY-MADES.		BOOTS AND SHOES.		FURNISHING.	
£1,259,157.		£325,775.		£538,661.		£566,713.	
Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.
£ s. d. 39162 10 3	s. d. 62 2-45	£ s. d. 10614 3 9	s. d. 65 1-95	£ s. d. 11444 6 11	s. d. 42 5-90	£ s. d. 15063 5 11	s. d. 53 1-92
75 17 0	0 1-44	19 9 8	0 1-43	32 10 3	0 1-45	28 3 7	0 1-19
1 7 6	0 0-03	0 7 1	0 0-03	0 11 8	0 0-03	0 11 5	0 0-03
1099 4 8	1 8-95	276 15 2	1 8-39	552 12 9	2 0-62	529 11 8	1 10-43
1107 1 9	1 9-10	1466 10 6	9 0-04	....	....	28 18 6	0 1-23
41 8 3	0 0-79	....	....	....	....	20 1 9	0 0-85
1870 13 2	2 11-65	324 9 2	1 11-90	519 12 1	1 11-15	672 16 0	2 4-49
21 10 4	0 0-41	6 18 3	0 0-51	5 14 10	0 0-26	6 17 1	0 0-29
6769 6 2	10 9-02	2115 18 10	12 11-88	835 6 9	3 1-22	1436 19 0	5 0-86
456 16 10	0 8-71	112 10 9	0 8-29	181 1 2	0 8-07	190 12 3	0 8-07
33 17 1	0 0-65	13 7 0	0 0-98	7 4 0	0 0-32	34 17 1	0 1-48
94 10 5	0 1-80	27 15 11	0 2-05	39 1 7	0 1-74	36 1 11	0 1-53
274 11 5	0 5-23	58 4 0	0 4-29	54 4 2	0 2-42	60 1 1	0 2-54
329 19 1	0 6-29	93 13 0	0 6-90	342 6 9	1 3-25	85 0 7	0 3-60
514 15 9	0 9-81	129 7 5	0 9-53	217 16 11	0 9-71	214 2 1	0 9-07
1725 13 7	2 8-89	288 17 7	1 9-28	560 6 2	2 0-97	1879 10 7	4 10-42
1707 0 5	2 8-54	242 6 8	1 5-85	407 5 0	1 6-14	947 15 5	3 4-14
210 7 3	0 4-01	45 11 3	0 3-36	105 4 1	0 4-69	109 13 6	0 4-64
63 7 1	0 1-21	15 13 3	0 1-17	26 16 3	0 1-19	26 6 4	0 1-11
81 11 8	0 1-56	16 14 10	0 1-24	17 9 0	0 0-78	26 8 2	0 1-12
1 11 11	0 0-03	0 0 10	....	0 1 3.	....	0 1 1	....
40 1 5	0 0-76	10 8 4	0 0-77	17 6 3	0 0-77	16 12 4	0 0-70
2173 13 6	3 5-44	502 16 0	3 1-04	882 16 11	3 3-34	814 0 2	2 10-47
1334 13 5	2 1-44	358 9 4	2 2-41	607 0 8	2 3-05	885 9 6	3 1-50
227 16 6	0 4-34	56 4 4	0 4-14	55 18 8	0 2-49	90 16 3	0 3-85
527 17 2	0 10-06	289 17 6	1 9-36	190 7 8	0 8-48	292 2 6	1 0-37
1030 19 4	1 7-65	197 3 2	1 2-52	415 1 3	1 6-49	942 17 0	3 3-93
2321 7 10	3 8-25	449 13 9	2 9-13	911 2 1	3 4-59	2046 19 11	7 2-69
1503 19 11	2 4-67	81 6 8	0 5-99	158 5 0	0 7-05	942 4 10	3 3-90
3625 6 4	13 8-40	3167 14 0	19 5-37	4480 7 3	16 7-62	4097 5 1	14 5-52
79429 2 0	116 7-58	20982 13 0	128 9-80	23067 17 4	85 7-79	31026 2 7	109 5-94

DISTRIBUTIVE EXPENSES AND RATE PER CENT. ON

NEWCASTLE.

NEWCASTLE.													
SALES =		TOTALS.				GROCERY.				COAL.			
		£5,670,321.				£4,040,879.				£120,658.			
		Amount.		Rate per £100.		Amount.		Rate per £100.		Amount.		Rate per £100.	
Expenses =		£	s. d.	s.	d.	£	s. d.	s.	d.	£	s. d.	s.	d.
Wages		73065	12 9	25	9-25	26892	8 10	13	3-37	365	5 6	6	0-66
Auditors		216	15 5	0	0-92	119	4 6	0	0-71	2	3 3	0	0-48
Scrutineers		5	19 0	0	0-03	4	3 7	0	0-03	0	2 8	0	0-03
Committees.....		2994	19 7	1	0-68	1324	1 10	0	7-86	8	1 4	0	1-60
Price Lists: Printing		1169	4 9.	0	4-95	235	6 1	0	1-40	....	....	....	....
" " Postage		57	16 5	0	0-24	57	16 5	0	0-34	....	....	....	....
Printing and Stationery..		3905	7 0	1	1-99	1321	9 8	0	7-85	31	10 4	0	6-27
Periodicals		81	13 2	0	0-34	48	14 2	0	0-29	1	13 10	0	0-34
Travelling		7429	14 4	2	7-45	1320	19 7	0	7-85	51	18 5	0	10-31
Stamps		2643	18 5	0	11-19	1084	15 7	0	6-44	8	10 7	0	1-70
Telegrams		261	7 5	0	1-11	125	19 10	0	0-75	0	13 5	0	0-13
Telephones.....		412	15 5	0	1-75	299	17 8	0	1-78	3	18 7	0	0-78
Miscellaneous		587	12 0	0	2-49	379	8 6	0	2-25	6	3 9	0	1-23
Adverts. and Showcards..		1148	11 7	0	4-86	716	14 11	0	4-26	18	12 8	0	3-71
"Wheatsheaf " Record ..		2228	5 8	0	9-43	1567	19 9	0	9-31	48	14 5	0	9-69
Rents, Rates, and Taxes..		3696	18 0	1	3-65	892	18 3	0	5-30	4	19 0	0	0-98
Power, Water, Lighting, and Heating		1857	14 0	0	7-86	1426	17 6	0	8-47	25	9 9	0	5-07
Exhibition and Congress .		244	10 9	0	1-03	164	17 7	0	0-98	5	6 3	0	1-06
Quarterly Meetings		61	11 2	0	0-26	43	5 6	0	0-26	1	7 1	0	0-27
Employé's' Picnic		62	2 0	0	0-26	15	11 0	0	0-09	....	....	....	....
Legal.....		10	15 5	0	0-04	10	11 4	0	0-06	0	0 3	....	....
"Annual," 1913		173	18 0	0	0-74	122	1 8	0	0-73	8	17 5	0	0-77
Dining-rooms.....		6068	4 6	2	1-66	4048	17 0	2	0-05	147	11 3	2	5-35
Repairs, Renewals, &c. ..		4429	5 6	1	6-75	2271	19 0	1	1-49	49	14 2	0	9-89
National Health, &c., Insurance		410	7 1	0	1-74	123	14 5	0	0-76	2	4 0	0	0-44
Insurance.....		1452	11 10	0	6-15	696	13 10	0	4-14	1	8 0	0	0-28
Depreciation: Land		1245	9 8	0	5-27	488	11 11	0	2-90	3	0 0	0	0-60
" Buildings ..		6899	14 9	2	3-09	3862	2 2	1	7-97	11	4 0	0	2-23
" Fixtures, &c.		1791	14 5	0	7-58	1023	9 2	0	6-08	5	9 4	0	1-09
Interest.....		19671	9 6	6	11-26	8990	6 8	4	5-40	132	16 1	2	2-41
Totals.....		149180	19 6	50	6-02	59125	17 11	29	3-17	941	15 4	15	7-32

SALES FOR THE YEAR ENDED DEC. 27TH, 1913—continued.

NEWCASTLE.

DRAPERY.				WOOLLENS AND READY-MADES.				BOOTS AND SHOES.				FURNISHING.			
£684,483.				£207,330.				£262,588.				£354,383.			
Amount.		Rate per £100.		Amount.		Rate per £100.		Amount.		Rate per £100.		Amount.		Rate per £100.	
£	s. d.	s. d.		£	s. d.	s. d.		£	s. d.	s. d.		£	s. d.	s. d.	
21978	15 5	64	2-64	4270	18 7	41	2-39	5659	9 2	43	1-26	13958	15 3	78	9-33
41	3 9	0	1-44	13	0 3	0	1-51	17	6 10	0	1-58	23	16 10	0	1-62
0	14 10	0	0-03	0	4 7	0	0-03	0	5 9	0	0-03	0	7 7	0	0-03
689	11 5	2	0-18	220	16 7	2	1-56	370	14 8	2	9-88	381	13 9	2	1-85
311	1 3	0	10-91	605	14 5	5	10-12	6	13 6	0	0-61	10	9 6	0	0-71
....															
844	15 6	2	5-62	300	1 9	2	10-74	224	4 0	1	8-49	583	5 9	3	3-50
12	0 6	0	0-42	4	10 3	0	0-52	5	5 6	0	0-48	9	8 11	0	0-64
3571	15 2	10	5-24	956	1 8	9	6-15	301	10 4	2	3-56	1197	9 2	6	9-10
813	17 1	2	4-54	116	8 10	1	1-48	127	18 4	0	11-69	492	8 0	2	9-35
104	12 7	0	3-67	11	11 7	0	1-34	3	10 3	0	0-32	14	19 9	0	1-01
44	7 0	0	1-56	13	3 8	0	1-53	16	16 5	0	1-54	34	12 1	0	2-34
85	10 9	0	3-00	17	14 0	0	2-05	23	2 2	0	2-11	75	12 10	0	5-12
167	14 8	0	5-88	33	3 3	0	3-84	133	7 4	1	0-19	79	13 9	0	5-35
279	6 5	0	9-79	83	17 0	0	9-70	106	12 9	0	9-75	141	15 4	0	9-60
1025	7 1	2	11-95	251	13 4	2	5-13	406	8 3	3	1-12	1115	17 1	6	3-57
160	10 5	0	5-63	99	4 8	0	11-49	61	19 4	0	5-66	83	12 4	0	5-66
28	0 0	0	0-98	15	5 1	0	1-76	16	11 1	0	1-51	14	10 9	0	0-98
7	14 5	0	0-27	2	6 3	0	0-27	2	19 3	0	0-27	3	18 2	0	0-27
20	2 0	0	0-70	3	6 0	0	0-38	3	18 0	0	0-36	19	5 0	0	1-30
0	2 0	....	....	0	0 6	....	....	0	0 7	....	....	0	0 9	....	....
21	15 10	0	0-77	6	13 6	0	0-77	8	8 5	0	0-77	11	1 2	0	0-75
855	2 9	2	5-98	254	7 7	2	5-45	324	6 11	2	5-65	432	19 0	2	5-32
1024	14 8	2	11-93	169	5 9	1	7-60	168	13 7	1	3-42	744	18 4	4	2-44
135	6 3	0	4-74	22	11 5	0	2-61	28	17 0	0	2-64	92	14 0	0	6-28
295	5 0	0	10-35	127	11 3	1	2-77	144	13 0	1	1-22	187	0 9	1	0-67
315	17 7	0	11-08	78	11 9	0	9-10	126	1 9	0	11-53	233	6 8	1	3-30
1227	6 11	3	7-03	397	18 2	3	10-06	487	7 0	3	3-54	913	16 6	5	1-89
443	0 5	1	3-53	9	8 4	0	1-09	11	18 6	0	1-09	298	8 8	1	3-21
4334	11 9	12	9-74	1859	12 2	17	11-26	2098	14 6	15	11-82	2205	8 4	12	5-36
38890	3 5	113	7-60	9975	2 8	96	2-70	10887	9 2	82	11-09	23360	11 0	131	10-05

DISTRIBUTIVE EXPENSES AND RATE PER CENT. ON

LONDON.

SALES— Expenses=	TOTALS.		GROCERY.		COAL.	
	£6,999,807.		£5,750,722.		£247,452.	
	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.
	£ s. d.	s. d.	£ s. d.	s. d.	£ s. d.	s. d.
Wages	76242 8 0	21 9·41	36340 12 7	12 7·66	1389 8 10	11 2·76
Auditors	242 15 11	0 0·83	166 18 8	0 0·70	4 6 6	0 0·42
Scrutineers	7 12 5	0 0·03	6 5 3	0 0·03	0 5 5	0 0·03
Committees.....	2329 6 10	0 7·92	1392 19 11	0 5·81	25 13 11	0 2·52
Price Lists: Printing....	1977 6 4	0 6·78	546 12 8	0 2·28	....	....
" " Postage	191 13 0	0 0·66	191 13 0	0 0·80	....	....
Printing and Stationery..	4040 14 5	1 1·85	2373 19 5	0 9·91	48 8 11	0 4·70
Periodicals	97 14 10	0 0·34	77 1 10	0 0·32	1 2 0	0 0·11
Travelling	12246 12 3	3 5·99	4122 15 10	1 5·21	425 12 7	3 5·28
Stamps	2346 2 7	0 8·04	1800 5 3	0 7·51	46 13 2	0 4·53
Telegrams	65 11 11	0 0·23	54 16 11	0 0·23	....	....
Telephones	791 1 11	0 2·71	479 1 5	0 2·00	26 15 11	0 2·60
Miscellaneous	529 4 3	0 1·82	402 14 1	0 1·68	0 14 0	0 0·07
Adverts. and Showcards..	1525 2 2	0 5·23	1153 12 1	0 4·82	35 14 2	0 3·46
"Wheatsheaf" Record ..	2858 3 11	0 9·80	2348 3 1	0 9·80	101 2 5	0 9·81
Rents, Rates, and Taxes..	4287 19 1	1 2·70	1359 3 10	0 5·67	21 16 10	0 2·12
Power, Water, Lighting, and Heating	1946 7 6	0 6·67	1090 9 8	0 4·55	3 3 3	0 0·80
Exhibition and Congress..	292 19 1	0 1·00	191 15 3	0 0·80	....	....
Quarterly Meetings	353 13 6	0 1·21	299 14 3	0 1·25	10 13 2	0 1·03
Employés' Picnic	100 4 0	0 0·34	56 16 6	0 0·24	0 18 0	0 0·09
Legal	92 0 3	0 0·32	76 17 8	0 0·32	0 0 6	....
"Annual," 1913	222 15 7	0 0·76	183 1 6	0 0·75	7 16 11	0 0·76
Dining-rooms	5069 10 10	1 5·83	3254 3 2	1 1·58	72 10 8	0 7·03
Repairs, Renewals, &c. ..	4888 6 3	1 4·76	2391 14 1	0 9·98	574 17 4	4 7·75
National Health, &c., Insurance	485 7 3	0 1·49	260 7 8	0 1·09	5 6 2	0 0·51
Insurance	1716 0 4	0 5·88	1003 0 7	0 4·19	3 6 9	0 0·32
Depreciation: Land	955 5 2	0 3·28	333 4 6	0 1·39	7 2 3	0 0·69
" Buildings....	6092 19 5	1 8·89	3036 3 7	1 0·67	19 13 4	0 1·91
" Fixtures, &c..	2052 15 11	0 7·04	1198 1 9	0 5·00	30 11 0	0 2·96
Interest.....	23662 9 0	6 9·19	18604 19 5	4 8·78	263 9 11	2 1·55
Totals	157660 4 4	45 0·56	79796 5 5	27 9·02	3132 9 4	25 3·81

SALES FOR THE YEAR ENDED DEC. 27TH, 1913—*continued.*

L O N D O N .

DRAPERY.		WOOLLENS AND READY-MADES.		BOOTS AND SHOES.		FURNISHING.	
£455,942.		£126,849.		£229,297.		£189,545.	
Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.	Amount.	Rate per £100.
£ s. d. 18144 15 4	s. d. 79 7-11	£ s. d. 5480 8 7	s. d. 86 4-90	£ s. d. 6712 5 7	s. d. 58 6-56	£ s. d. 8174 17 1	s. d. 86 3-09
32 10 3	0 1-71	10 16 8	0 2-05	15 3 5	0 1-59	13 0 5	0 1-65
0 9 11	0 0-03	0 2 9	0 0-03	0 4 11	0 0-03	0 4 2	0 0-03
359 15 7	1 6-94	134 18 4	2 1-53	239 17 0	2 1-10	175 17 1	1 10-27
543 7 3	2 4-60	817 2 10	12 10-60	22 3 3	0 2-32	49 0 4	0 6-21
....							
707 11 11	3 1-25	287 3 0	4 6-33	307 2 6	2 8-15	316 8 8	3 4-07
6 15 3	0 0-36	3 14 8	0 0-71	5 5 3	0 0-55	3 15 10	0 0-48
3819 14 0	16 9-06	1484 15 8	23 4-92	1160 15 5	10 1-50	1232 18 9	13 0-12
226 3 2	0 11-91	76 14 10	1 2-52	105 12 1	0 11-05	90 14 1	0 11-47
4 17 8	0 0-26	1 10 2	0 0-29	2 3 4	0 0-23	2 3 10	0 0-28
132 19 5	0 7-00	43 18 3	0 8-31	29 1 4	0 3-04	79 5 7	0 10-04
56 19 2	0 3-00	14 8 7	0 2-73	26 14 2	0 2-79	27 14 3	0 3-51
120 2 8	0 6-33	29 3 7	0 5-52	152 10 0	1 3-96	33 19 8	0 4-30
186 7 10	0 3-81	51 14 10	0 9-79	93 2 2	0 9-75	77 13 7	0 9-84
1359 1 3	5 11-54	311 9 9	4 10-93	518 12 3	4 6-23	717 15 2	7 6-38
342 13 10	1 6-04	113 16 0	1 9-53	198 14 8	1 8-80	192 9 8	2 0-37
52 3 2	0 2-75	19 18 3	0 3-77	20 4 11	0 2-12	8 17 6	0 1-11
17 1 1	0 0-90	5 16 10	0 1-11	11 13 11	0 1-22	8 14 3	0 1-10
21 14 6	0 1-14	5 1 9	0 0-96	5 13 4	0 0-59	9 19 11	0 1-27
6 18 11	0 0-37	1 17 2	0 0-35	3 5 9	0 0-34	3 0 3	0 0-33
14 8 8	0 0-75	4 2 0	0 0-77	7 5 3	0 0-76	6 1 3	0 0-77
815 9 0	3 6-92	243 3 10	3 10-01	403 7 0	3 6-22	280 17 2	2 11-56
905 7 7	3 6-39	436 13 2	6 10-62	264 8 1	2 3-67	415 6 5	4 4-59
80 12 5	0 4-24	19 10 4	0 3-69	27 6 8	0 2-86	42 4 0	0 5-34
292 5 3	1 3-38	138 1 8	2 2-13	149 2 4	1 3-61	130 3 9	1 4-49
290 1 9	1 3-27	105 14 11	1 8-01	77 18 7	0 8-16	141 3 2	1 5-37
1272 13 5	5 6-99	456 3 4	7 2-31	553 18 10	4 9-98	754 6 11	7 11-52
338 5 11	1 5-81	117 5 4	1 10-18	155 6 7	1 4-26	213 5 4	2 3-00
4552 10 7	19 11-64	1589 15 10	25 0-60	2239 18 5	19 11-68	1362 14 10	14 4-55
34603 16 9	151 9-49	12004 2 11	189 3-20	13558 17 0	118 3-17	14564 12 11	153 8-16



THE SCOTTISH
CO-OPERATIVE WHOLESALE
SOCIETY LIMITED.



PLATES, ADVERTISEMENTS,
STATISTICS, &c.,

Pages 283 to 397.

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY LIMITED.

Enrolled 20th April, 1868, under the provisions of the Industrial and Provident Societies Act, 20th August, 1867, 30 and 31 Vict., cap. 117, sec. 4.

Business Commenced September 8th, 1868.

CENTRAL OFFICES AND FURNITURE WAREHOUSE:
MORRISON STREET, GLASGOW.

GROCERY AND PROVISION WAREHOUSES:
PAISLEY ROAD, CROOKSTON AND CLARENCE STREETS,
GLASGOW.

DRAPERY WAREHOUSE:
DUNDAS, WALLACE, AND PATERSON STREETS, GLASGOW.

BOOT AND SHOE WAREHOUSE:
DUNDAS STREET, GLASGOW.

SHIRT, BESPOKE CLOTHING, JUVENILE CLOTHING, AND
AERATED WATER FACTORIES:
PATERSON STREET, GLASGOW.

MANTLE AND UMBRELLA FACTORIES:
DUNDAS STREET, GLASGOW.

HAM-CURING, SAUSAGE FACTORY, WATERPROOF FACTORY,
CARTWRIGHT, AND SCALE REPAIR DEPARTMENTS:
PARK STREET, K.P., GLASGOW.

FACTORIES FOR BOOTS AND SHOES, CLOTHING, FURNITURE AND
BRUSHES, PRINTING, PRESERVES, CONFECTIONS, CHEMICALS,
COFFEE ESSENCE, TOBACCO, PICKLES, AND TINWARE:
SHIELDHALL, NEAR GOVAN, GLASGOW.

Branches.

LINKS PLACE, LEITH.
GRANGE PLACE, KILMARNOCK.
SEAGATE, DUNDEE.
HENRY STREET, ENNISKILLEN, IRELAND.

FURNITURE WAREHOUSE, DRAPERY & BOOT SAMPLE
ROOM—CHAMBERS STREET, EDINBURGH.
CHANCELOT FLOUR MILLS—EDINBURGH.
JUNCTION FLOUR AND OATMEAL MILLS—LEITH.
REGENT FLOUR MILLS—GLASGOW.
SOAP WORKS—GRANGEMOUTH.
ETTRICK TWEED MILLS—SELKIRK.
HOSIERY FACTORY—LEITH.
DRESS SHIRT FACTORY AND LAUNDRY—PAISLEY.
FISH-CURING WORKS—ABERDEEN.
BLANKET MILLS—GALSTON.

CREAMERIES :

IRELAND—ENNISKILLEN, BELNALECK, GOLA,
FLORENCE COURT, S. BRIDGE, GARDNER'S CROSS,
BLACKLION, GLENFARNE, MONEAH;
BLADNOCH AND WHITHORN, WIGTOWNSHIRE, N.B.

CALDERWOOD ESTATE AND RYELANDS MILK CENTRE,
LANARKSHIRE.

Bankers :

THE UNION BANK OF SCOTLAND LIMITED.

Head Offices :

GLASGOW :
INGRAM STREET.

LONDON :
62, CORNHILL, E.C.

EDINBURGH :
GEORGE STREET.

General Manager : Manager : Manager :
ARTHUR C. D. GAIRDNER. GEORGE J. SCOTT. WILLIAM GRAHAM.

General Committee.

President:

Mr. ROBERT STEWART, "Endrick," Percy Drive, Giffnock.

Secretary:

Mr. JOHN PEARSON, "Beechdale," Fenton Street, Alloa.

Directors:

Mr. PETER GLASSE.....	185, Byres Road, Glasgow.
Mr. THOMAS LITTLE	264, Scott Street, Galashiels.
Mr. WILLIAM R. ALLAN.....	"Inchbank," Balhousie Street, Perth.
Mr. JAMES YOUNG	34, New Street, Musselburgh.
Mr. GEORGE THOMSON.....	"Newfield," Stevenson Street, Kilmarnock.
Mr. ALEX. B. WEIR	"Drhoma," Paisley Road, Barrhead.
Mr. C. W. MACPHERSON.....	80, Montpelier Park, Edinburgh.
Mr. T. B. STIRLING	Yew Cottage, Middleton Street, Alexandria.
Mr. WM. GALLACHER.....	"Loretto," Montgomery Street, Larkhall.
Mr. JOHN BARDNER	22, Netherton, Dunfermline.

Sub-Committees:

(1) FINANCE AND PROPERTY—

Messrs. GLASSE, ALLAN, GALLACHER, and THOMSON.

Conveners: Mr. GALLACHER (Finance). Mr. GLASSE (Property).

(2) GROCERY: DISTRIBUTIVE AND PRODUCTIVE—

Messrs. STEWART, LITTLE, BARDNER, and YOUNG.

Conveners: Mr. BARDNER (Distributive). Mr. STEWART (Productive).

(3) DRAPERY AND FURNISHING: DISTRIBUTIVE AND PRODUCTIVE—

Messrs. STIRLING, PEARSON, MACPHERSON, and WEIR.

Conveners: Mr. MACPHERSON (Distributive). Mr. STIRLING (Productive).

The President is *ex officio* a member of all Sub-Committees.

Auditors:

Mr. JNO. MILLEN, Rutherglen. | Mr. ROBT. J SMITH, C.A., Glasgow.

Mr. WM. H. JACK, F.S.A.A., Glasgow.

(Public Auditors under the Industrial and Provident Societies and Friendly Societies Acts.)

Officers of the Society.

Accountant:

Mr. ROBERT MACINTOSH, Glasgow.

Cashier:

Mr. ALLAN GRAY, Glasgow.

Buyers, &c.:

Grocery and Provisions.....	GLASGOW.....	Mr. E. ROSS.
"	"	Mr. JOHN Mc.DONALD.
"	"	Mr. M. Mc.CALLUM.
"	"	Mr. A. S. HUGGAN.
"	LEITH	Mr. PETER ROBERTSON.
"	"	Mr. WILLIAM Mc.LAREN.
"	"	Mr. A. W. JOHNSTONE.
"	KILMARNOCK	Mr. DAVID CALDWELL.
"	DUNDEE	Mr. JAMES WILKIE.
Potato Department	GLASGOW.....	Mr. HUGH CAMPBELL.
"	LEITH	Mr. WM. DRUMMOND.
Cattle.....	GLASGOW.....	Mr. WILLIAM DUNCAN.
Provisions.....	ENNISKILLEN	Mr. WILLIAM WHYTE.
Preserve Works	GLASGOW.....	Mr. N. ANDERSON.
Chemical Department	"	Mr. A. GEBBIE.
Tobacco Factory.....	"	Mr. THOMAS HARKNESS.
Flour Mills—Chancelot and	"	Mr. WM. F. STEWART.
Regent Oatmeal and Flour	"	Mr. JAMES TIERNEY.
Mill—Junction	EDINBURGH	Mr. JOHN PAISLEY.
Soap Works	GRANGEMOUTH	Mr. J. A. PENNY.
Printing & Stationery Dept....	GLASGOW.....	Mr. DAVID CAMPBELL.
Drapery Department	"	Mr. DAVID GARDINER.
"	Assistant..	Mr. J. Mc.GILCHRIST.
"	"	Mr. WM. ALLAN.
Furniture Department	{	Mr. WILLIAM MILLER.
"	Assistant	Mr. THOMAS FENWICK.
"	EDINBURGH	Mr. GEO. CARSON.
Tinware.....	GLASGOW.....	Mr. J. H. TURNBULL.
Boot and Shoe Department ..	{	Mr. P. Mc.FARLANE.
"	Assistant	Mr. J. J. HORN.
Ettrick Tweed & Blanket Mills..	SELKIRK	Mr. J. H. OLDFIELD.
Building Department	GLASGOW	Mr. WILLIAM MERCER.
Engineering & Electrical Depts..	"	Mr. JAMES STEWART.
Carting Department	"	Mr. JAMES CALDWELL.
Coal Department	"	Mr. T. BURTON.
Fish Curing Department	ABERDEEN	Mr. W. C. STEPHEN.
Wheat Buying Depôt	WINNIPEG	Mr. GEO. FISHER.
	(CANADA)	
Creameries.....	WIGTOWNSHIRE..	Mr. ROBERT GREEN.
Estate.....	LANARKSHIRE	Mr. G. G. YOUNG.

Business Arrangements.

Registered Office :

MORRISON STREET, GLASGOW.

Branches :

LINKS PLACE, LEITH ; GRANGE PLACE, KILMARNOCK ;

SEAGATE, DUNDEE ;

HENRY STREET, ENNISKILLEN, IRELAND ;

LEMAN STREET, LONDON, E.

Societies, to which our trade is strictly confined, desirous of opening an account with this Society, should forward a copy of their registered Rules and latest balance sheet ; or, if but recently started, a statement showing the number of members, value of shares, amount subscribed for and paid up, weekly turnover expected, and the amount of credit allowed, if any, per member in proportion to the capital paid up. Should these particulars be considered satisfactory, goods will be supplied on the following terms :—The *maximum credit allowed is fourteen days, and interest is charged quarterly on all in excess of this allowance at the rate of $2\frac{1}{2}$ per cent. per annum, but in cases where the debt exceeds one month's purchases 5 per cent. is charged.*

Interest at the rate of $2\frac{1}{2}$ per cent. per annum is allowed on prepaid accounts.

The Directors, by authority of the general meeting, are empowered to have the books of societies examined whose accounts are overdue, and to take the necessary steps to protect the other members of the federation.

Orders for goods should bear the price or brand of the article wanted, the mode of transit, and name of station to which the goods are to be sent. Orders for the different departments should be on separate slips. Goods not approved of must be returned at once and intact. No claim for breakage, short weight, &c., can be entertained unless made within six days after goods are received. Delay in delivery should be at once advised.

BUSINESS PREMISES

&c.,

OWNED BY

THE SCOTTISH
CO-OPERATIVE WHOLESALE
SOCIETY LIMITED.

With Diagrams showing Progress of Society
since Commencement.

Scottish Co-operative Wholesale Society Limited.



First Central Premises owned by the Society.

THE Scottish Co-operative Wholesale Society Limited was registered in April 1868, and commenced business during September of the same year in rented premises in Madeira Court, Argyle Street, Glasgow. During 1872 ground was purchased at the junction of Morrison Street and Paisley Road, and to the Warehouse erected there, and shown on this page, the Society's business was transferred in 1874. The whole of this gusset-shaped piece of ground was acquired by 1882, and the Warehouses and Offices erected thereon formed the Central Premises of the Society, 119 Paisley Road, Glasgow, until the Morrison Street Premises were occupied in 1897.



Grocery and Provision Warehouse, Coal and Building Departments' Offices, 119 Paisley Road, Glasgow.
CENTRAL PREMISES OF THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY UNTIL 1897.



Registered Office and Furniture Warehouse, 95 Morrison Street, Glasgow.

Registered Office and Furniture Warehouse :
95 Morrison Street, Glasgow.

THE block of buildings shown on the opposite page forms, since 1897, the Central Premises of the Scottish Wholesale. With its splendid façade fronting Morrison Street, and occupying a commanding situation close by the river Clyde, this structure forms one of the most imposing features of street architecture in the southern part of Glasgow.

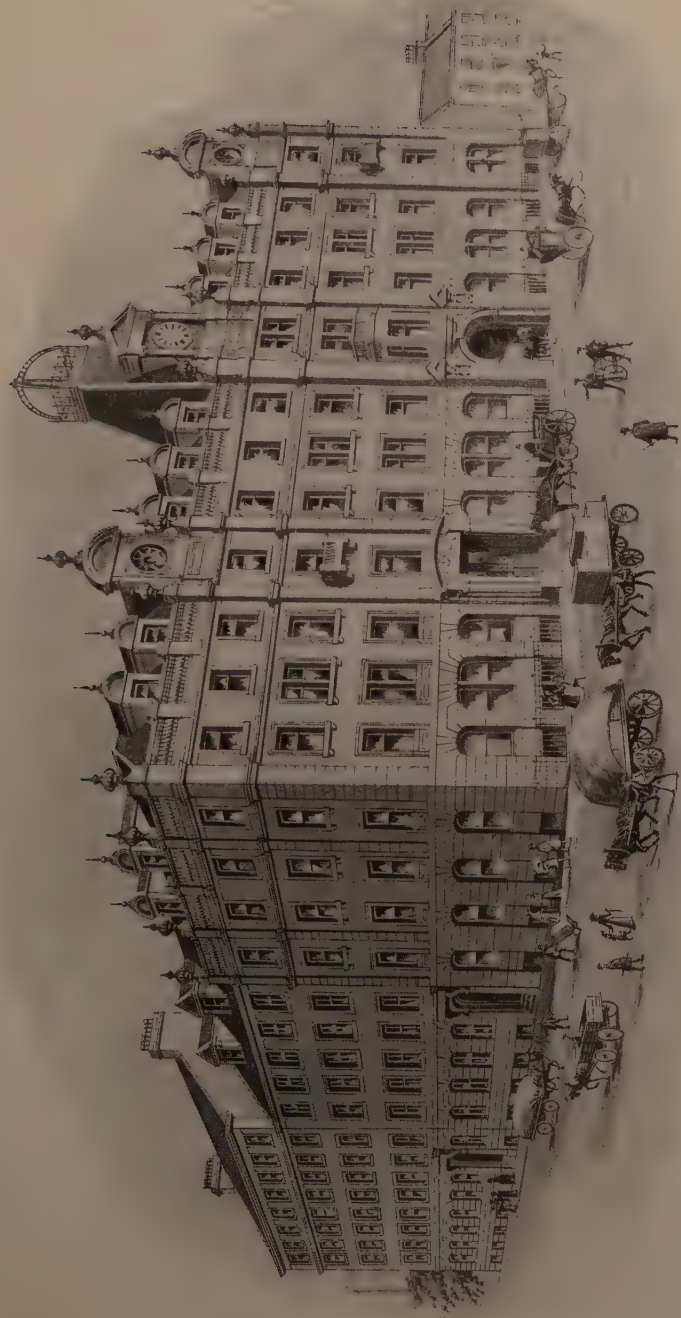
Here the Central Office, with its staff of over two hundred and sixty clerks, is located. This occupies the whole of the first floor, the ground floor giving accommodation for the Board Room, Committee Rooms, Grocery Managers' Rooms, and also the Grocery Department Saleroom. The basement and all the other floors in the front building are fully occupied by the Furniture and Furnishing Department Show-rooms. Fronting Clarence Street—on the left side of the drawing, and to the rear of the main building—is a block extending through to Crookston Street, on the right. The great bulk of this space is devoted to warehouse accommodation for the Grocery Department, and here, also, the spacious Clarence Street Hall belonging to the Society is located.

Grocery and Provision Warehouse, Stationery
Department, etc.:

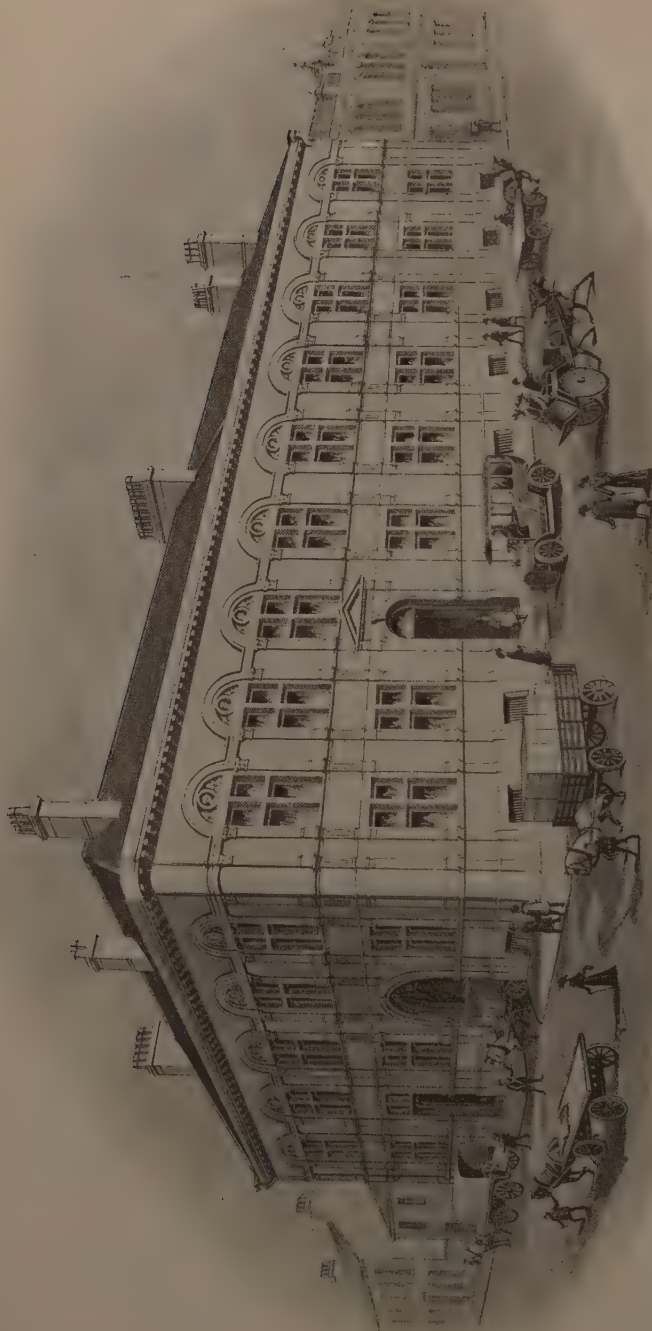
Links Place, Leith.

NINE years after the start of the Wholesale in Glasgow, the Leith Branch was opened (in April 1877), primarily to facilitate the handling of Continental produce, but it was soon found advisable to add a full stock of groceries. This Branch has proved of great service and utility in dealing with retail societies in the East of Scotland.

Business developments soon forced it out of the original rented premises in Constitution Place Leith, and, ground having been secured at Links Place in May 1879, the first portion of the buildings here shown was erected by the Society. At various dates extensive alterations and additions have been made to the structure. In addition to the Grocery Warehouse, a Stationery Department, Aerated Water Factory (started 1898), and a Ham-curing Department form valuable adjuncts of this Branch of the Wholesale.



Grocery and Provision Warehouse, Links Place, Leith.
ESTABLISHED 1877.



Grocery and Provision Warehouse, Grange Place, Kilmarnock.
ESTABLISHED 1878.

Grocery and Provision Warehouse: Grange Place, Kilmarnock.

LESS than a twelvemonth after the inauguration of the Branch at Leith, it was decided to open a Depot in Kilmarnock to deal with agricultural produce of all kinds in Ayrshire and surrounding counties. In February 1878 this Branch was opened, and its career, like that of most other ventures of the Wholesale, has been uniformly prosperous.

Intended originally as a store from whence cheese, butter, eggs, etc., could be distributed to retail societies to the orders of the various Branches, this Depot also does a very extensive trade in potatoes. These are planted under the supervision of the Department, or purchased in the fields at agreed-on rates per acre, for the direct supply of retail shops. A very large business in cheese is also done.

Grocery and Provision Warehouse: Seagate, Dundee.

FOUR years elapsed from the foundation of the Kilmarnock Depot before another Branch of the Wholesale was started. This time the impelling idea was to provide societies in the North of Scotland with a convenient centre from which to obtain supplies. Dundee was fixed on as the most suitable place, and there, in premises at the corner of Trades Lane, a Branch was opened in 1881.

Until 1906 business was successfully conducted in the building originally occupied, but in that year a disastrous fire swept it entirely away, and caused the Directors to find a site elsewhere. Ground was soon afterwards purchased in Seagate, Dundee, and the Warehouse shown opposite erected and opened for business in July 1909.



Grocery and Provision Warehouse, Seagate, Dundee.

ESTABLISHED 1881.



Central Creamery.

Power Station.

Enniskillen Branch—Central Premises.
ESTABLISHED 1885.

Egg Stores and Bacon Factory.

Central Premises, Enniskillen Branch, Ireland.

THE growing quantities of Irish produce handled by the Wholesale led the Directors at an early date to consider the advisability of establishing a Buying Branch or Depot in Ireland for collecting the produce of the north-western districts. After careful investigation, Enniskillen, directly communicating with Londonderry and Belfast by rail and thence with Glasgow by an admirable service of steamers, was fixed on as the most suitable centre. In premises rented by the Society in that town a Branch was started during May 1885, and its progress since has justified the choice of location.

In addition to a thoroughly up-to-date Central Creamery established in 1908, there are now eight Auxiliary Creameries belonging to the Society within a range of ten miles of Enniskillen. The names of these are Moneah, Gardner's Cross, Gola, S Bridge, Belnaleck, Blacklion, Glenfarne, and Florencecourt.

Drapery Warehouse, Wallace Street, Glasgow.

THE Drapery Department was started on 28th December 1873, in a corner of the rented premises first occupied by the Society in Madeira Court, Argyle Street, Glasgow. The Warehouse now occupied in Wallace Street, Dundas Street, and Paterson Street, and shown on the opposite page, gives a fair idea of its growth and development during the intervening years.

The Warehouse at the present time is divided into forty departments dealing with every known variety of drapery goods. Heating, ventilating, and sanitary arrangements are of the most approved description, and from a hygienic standpoint the Warehouse meets all that science at present demands. This, with the admirable planning of departments and the up-to-date equipment, justifies its claim to premier position among such establishments.

There are also attached to the Warehouse, Mantle, Millinery, and Umbrella Workrooms, while the allied Productive Departments include the Wool Shirt Factory, Waterproof Factory, Juvenile Clothing Factory, Underclothing Factory, and Bespoke Clothing Factory, Glasgow; the Ready-made Clothing Factory, Artisan Clothing Factory, and Hosiery Factory, Shieldhall; Ettrick Tweed and Blanket Mills, Selkirk; Ayrshire Blanket Mill, Galston; the Dress Shirt Factory and Potterhill Laundry, Paisley; and Hosiery Factory, Leith.



Drapery Warehouse, Dundas Street, Wallace Street, and Paterson Street, Glasgow.

ESTABLISHED 1873.



Drapery Warehouse, Wallace and Paterson Streets, Glasgow.

(ANOTHER VIEW.)

Drapery Warehouse, Wallace Street, Glasgow.

(ANOTHER VIEW.)

THE demand for increased space to meet the steady growth of trade in Drapery goods made it necessary to enlarge the Warehouse, and the extension in Paterson Street, which was opened in June 1909, is shown on the extreme right of the picture.

In the short period of three years it became apparent that more accommodation must be found, and a further addition, also in Paterson Street, affording 20,832 square feet of extra floorage, was opened in July of this year (1914). A motor-car is seen near the main entrance in Wallace Street.

Productive Factories, Paterson Street, Glasgow.

THESE buildings are given over solely to production, and occupy the greater portion of the west side of Paterson Street, between Gloucester Street and Scotland Street. Here accommodation is found for the manufacture of aerated waters; shirts; underclothing; juvenile clothing; and bespoke clothing. Originally two-storied only, in 1908 another flat was added, which has considerably increased the usefulness of the buildings. A large extension, for Drapery Production, is nearing completion.



Productive Factories, Paterson Street, Glasgow.



New Stationery Warehouse, Morrison Street, Glasgow.

New Stationery Warehouse, Morrison Street, Glasgow.

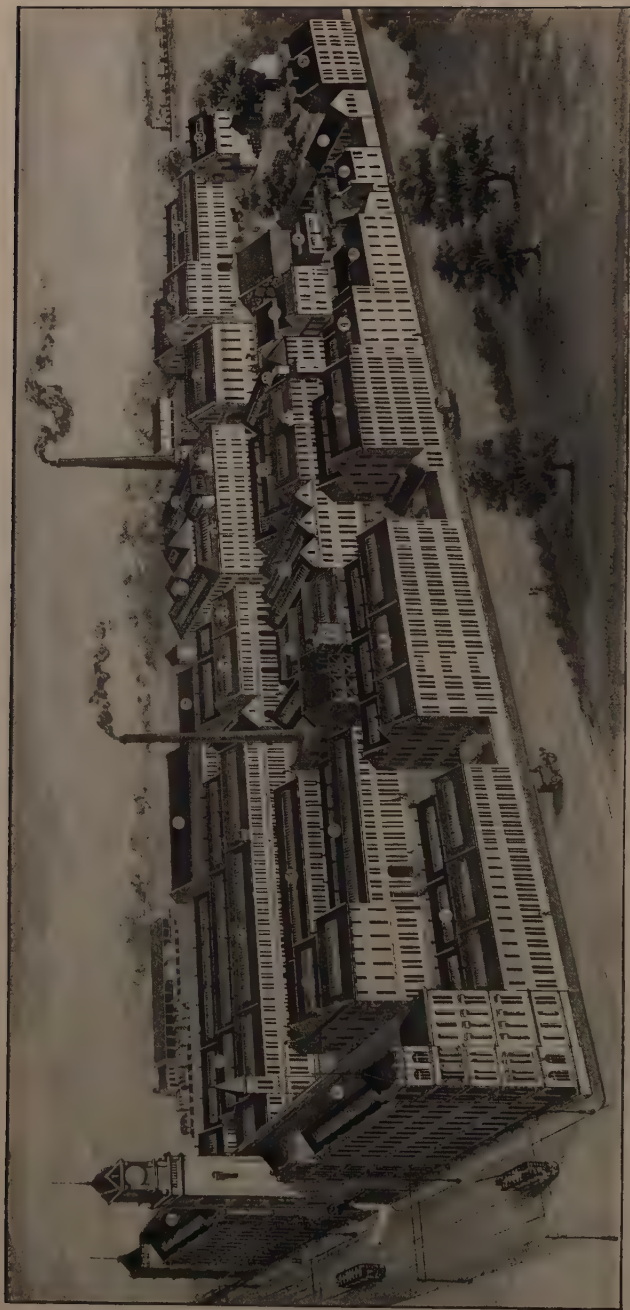
IN the year 1882 the Stationery Department was commenced in a small portion of the "gusset" buildings, Morrison Street. As business increased the Department was removed from time to time, until, in the year 1910, the Directors sought and obtained power to proceed with the building depicted opposite. Situated near the principal building in Morrison Street, the erection was completed in September 1911, and at once proved of great service, being temporarily utilised for the housing of the Furniture Departments burnt out in the fire at Morrison Street, 3rd September 1911. Since January of 1913 the Stationery Department has occupied the building, which is equipped in every way to suit the trade. A magnificent showroom runs the full length of the first flat, the basement, main, and other floors being utilised for stock and despatch purposes.

Furniture and Furnishing Showrooms: Chambers Street, Edinburgh.

TO meet the requirements of societies in the East of Scotland, a branch of the Furniture and Furnishing Department was opened in premises secured during 1898 in Chambers Street, Edinburgh. In these is stocked a full range of goods similar to that in the Central Furnishing Warehouse, Glasgow. The business rapidly extended, and this led to the purchase of the adjoining property of Minto House—the most distant part of the structure. Transformed to suit the requirements of the trade, the whole building now forms a connected and spacious Warehouse.



Furniture and Furnishing Showrooms, Chambers Street, Edinburgh.
ESTABLISHED 1808.



Productive Works, Shieldhall, Govan.

(A) PORTION OF FRONT BUILDING NOT YET ALLOCATED.

1. PRINTING DEPARTMENT.
2. CABINET FACTORY.
3. HOSIERY FACTORY.
4. COFFEE ESSENCE.
5. BRUSH FACTORY.

6. FIREMASTER'S HOUSE.
7. JOINER'S WORKSHOP.
8. WORKMEN'S DWELLINGS.
9. COOPERAGE.
10. MECHANICAL, ELECT'L.

11. TINWARE.
12. PRESERVE WORKS.
13. TAILORING FACTORY.
14. ARTISAN CLOTHING.
15. DINING ROOMS, ETC.

16. BOOT FACTORY.
17. CURRYING WORKS.
18. TANNERY.
19. CONFECTIONERY WORKS.
20. PICKLE WORKS.

- 21-22. CHEMICAL DEPT.
23. POWER STATION.
24. TOBACCO FACTORY.
25. STABLES.

S.C.W.S. Productive Works, Shieldhall, Govan.

THE Shieldhall Works of the S.C.W.S. afford a vivid and impressive illustration of the growth of Productive Co-operation and the inherent force of the Co-operative Movement in Scotland.

Situated on the south side of the road, between Glasgow and Renfrew, and about three miles from the Society's Central Offices, it is claimed for the remarkable hive of industry now established there that nowhere else in this country, or any other, are so many different industrial operations carried on within one common gateway. The justice of this claim is apparent when it is recollected that the production of the various commodities is so highly specialised as to call for the services of nearly one hundred trades or occupations. There are now sixteen Factories in operation, employing over 4,000 persons, whose yearly wages bill exceeds £191,000, and who produce goods to the value of over £1,045,000 per annum.

In the planning of the Works, sanitation, ventilation, and good health conditions have always been insisted on; and these, combined with the best labour conditions in the trades represented, place the Shieldhall Works in a position second to none in Scotland.

New Frontage and Printing Department, Shieldhall.

THE illustration on the opposite page shows the building which eventually will form the street front for Shieldhall. The gateway and side structures, with a large portion of the west wing, are already completed; the latter, with the whole of the shaded portion to the right of the picture, being occupied by the Printing Department.

This important branch of the Wholesale's industrial enterprises was established in 1887, and transferred to Shieldhall two years later. The Department has extended rapidly, and to the original letterpress printing, bookbinding and paper-ruling, paper-bagmaking, lithographing, designing, stereo and electrotyping, machine type-setting, and paper-boxmaking have been added in the order given. All of these can be seen in the complex establishment of to-day. The forty-eight hour week has been in force since 1901, and at the present time (October 1914) there are over 500 persons employed.



New Frontage and Printing Department, Shieldhall.
PRINTING DEPARTMENT ESTABLISHED 1887.



Boot Factory, Shieldhall.

Boot Factory, Shieldhall.

THE Boot Factory is the largest of all the Shieldhall Departments and the first to be established there. Started originally in part of what is now the Drapery Warehouse, Glasgow, it has expanded with very great rapidity, and at the present date (1914) the average weekly output is well over 15,000 pairs of all classes of footwear. For the year 1913, 788,146 pairs were manufactured.

Every kind of boots and shoes for men and women, boys and girls, is now made, the quality ranging from strong, heavy boots for pit or workshop to the most elegant of footwear. The supply of leather is drawn from all parts of the world, that for pit boots coming from India, box calf from the Continent generally, black and tan glacé kid chiefly from America. For the last-named class of work alone some 82,000 goatskins are required annually. Altogether nearly 200,000 hides are used up in the course of a twelvemonth, apart from over 300 tons of sole leather.

An auxiliary Factory, where special attention is given to the manufacture of boys' and girls' footwear and slippers, is situated in Adelphi Street, Glasgow. Equipped with every modern labour-saving appliance and machine, the Shieldhall Boot Factory is the finest and largest in Scotland. At October 1914, 1,400 persons were employed in the two factories.

Cabinet Factory, Shieldhall.

AN Upholstery Department, inaugurated by the Wholesale in 1882, and conducted for a time under the ægis of the Drapery Department, was the beginning of the furniture trade now done. In 1884 a Cabinet-making Workshop was opened in Houston Street, Glasgow; and here, with a complement of six persons, the making of furniture was begun.

In March 1888 the scene of operations was removed to Shieldhall, to the first part of the existing Factory, which, by addition after addition to meet the growing demands of the trade, has reached the dimensions of the building shown in the illustration. It ranks among the largest of its kind in Scotland, and structural alterations now being effected will place it in the forefront of such establishments. It has a floor space of over two acres, a complete electric installation for power and light, the May-Oatway fire-alarm system throughout, and is replete with the latest appliances for facilitating production.

The furniture turned out from this Factory, which includes every article required for house, office, or boardroom, has earned a name for soundness of construction and beauty of design, and received the well-merited distinction of a Diploma of Honour for work exhibited at Glasgow International Exhibition during 1901. In the Scottish Historical Exhibition, held in Glasgow during 1911, the magnificent group of cases and furniture shown by the S.C.W.S. was entirely produced by the Cabinet Factory, Shieldhall.



Cabinet Factory, Shieldhall.

CABINET FACTORY ESTABLISHED 1884.



Dining Rooms and Ready-made Clothing Factory, Shieldhall.
CLOTHING FACTORY ESTABLISHED 1881.

Dining-Rooms and Ready-made Clothing Factory, Shieldhall.

THE higher part of the buildings shown here is occupied by the Dining and Recreation Rooms. On the ground floor are two large Halls, supplied with newspapers, periodicals, and other means of recreation. On the other floors Directors' and Managers' Dining Rooms and Halls for the use of over 4,000 workers employed at Shieldhall are situated. Meals can be obtained there at rates just sufficient to cover cost of food and expenses of service, and these facilities are largely taken advantage of.

The Ready-made Clothing Factory occupies the long range of building to the rear of the Dining Halls, and is the present-day representative of the first Clothing Factory of the Wholesale. This was started in 1881 in Dundas Street, Glasgow; was removed to Wallace Street, Glasgow, soon after; and from thence to Shieldhall. All kinds of ready-made clothing for men, youths, and boys are made up here, immense quantities being turned out in the course of a year. Every appliance for facilitating work has been installed, and this Factory to-day will hold its own for arrangement and equipment with the best in the country.

Chancelot Roller Flour Mills, Edinburgh.

DIFFERING from all other ventures of the Wholesale in the magnitude of the original undertaking, Chancelot Roller Flour Mills represent the boldest step yet taken by the Society in Co-operative Production. The nature of the work to be undertaken precluded the possibility of starting in a small way; and it was only after mature deliberation that the Directors entered on the scheme, of which the building shown on the opposite page is the outcome. A feu of fully three acres having been secured in Bonnington Road, Edinburgh, it was decided to erect thereon a group of mills, the output of which would, at least, approximate to the demand likely to be made on them.

The opening ceremony took place in August 1894, and the opinion was freely expressed that these Mills were the finest of their kind in this or any other country. From the start the Mills have been entirely successful. They are now fully equipped with the most improved milling machinery, and have been kept running night and day to meet the great demands made on their productions.



Chancelot Roller Flour Mills, Edinburgh.

ESTABLISHED 1894.



Junction Meal and Flour Mills, Leith.

Junction Meal and Flour Mills, Leith.

THE product of Chancelot Mills met with such a favourable reception that it became necessary to devise some plan for rapidly augmenting supplies. The Directors therefore gave their attention to the problem, a solution for which was found by the purchase of Junction Meal and Flour Mills, Leith, in August 1897. These important Mills are in the immediate vicinity of Chancelot Mills, and as an investment they have proved both satisfactory and profitable.

Since acquiring these Mills, and to cope with the demand for Scotland's staple food, the Oatmeal Mill has been entirely remodelled and extended. About 1,200 sacks of flour are produced per week, and the milling of pod barley is also carried on.

Regent Roller Flour Mills, Glasgow.

THE demand made on the products of the two Mills already mentioned justified the existence of another, and the question of building or acquiring one was immediately taken up. As a result, arrangements were made with Messrs John Ure & Son, the proprietors, and in November 1903, Regent Mills, Glasgow, were purchased from that firm by the Society, and business began in the following year.

Situated on the banks of the classic Kelvin, the story of these Mills runs back to medieval times. For three and a half centuries the old Regent Mills were in possession of the Bakers' Incorporation of Glasgow, but being burned down, in 1886 they passed into the hands of the Messrs Ure, by whom they were entirely rebuilt and enlarged to something like their present dimensions. Being in good order, production commenced immediately the transfer was completed. Various alterations and additions have since been made, and the Mills now rank among the best equipped in the country.

The total productive capacity of the three Mills owned by the Society exceeds 12,300 sacks per week, or over 640,000 sacks per working year.



Regent Roller Flour Mills, Glasgow.

ACQUIRED 1903.



Grain Elevators, Winnipeg, Canada.

ESTABLISHED 1906.

Grain Elevators, Winnipeg, Canada.

AS may be understood, the amount of grain necessary to keep three Mills with the working capacity of those just described in full operation is very large. This fact soon led the Directors to consider the question of arranging to purchase the raw material as near the first source as possible, and, as a result, a buyer was appointed in 1906 and an office taken in Winnipeg, Canada, the capital of the vast wheat-growing regions of that Colony.

From its inception the step has proved satisfactory. Thirteen large Elevators, each capable of storing 30,000 bushels of wheat, have been erected at a cost of over £1,000 each; and other two are now (1914) in course of construction. From these the grain is forwarded as required to the Terminal Elevators at Port Arthur and Fort William, and shipped from thence to this country *via* Montreal when the St Lawrence is open, or from ports on the Atlantic seaboard during the winter season

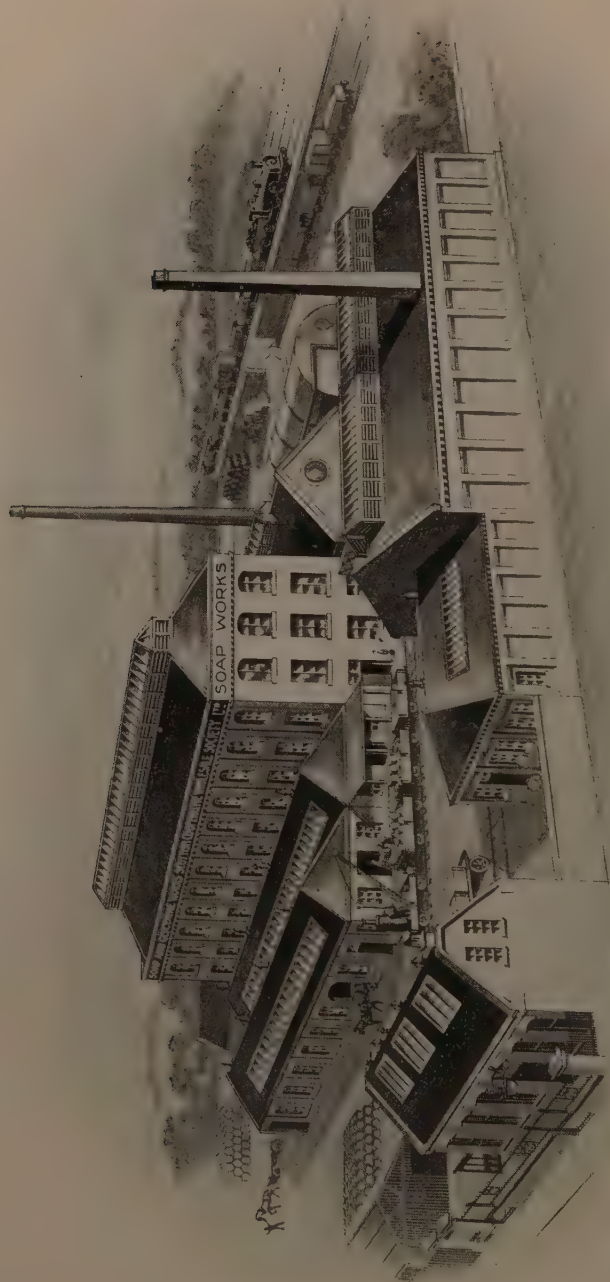
Ettrick Tweed and Blanket Mills, Selkirk.

AFTER being carried on for some years by the Scotch Tweed Manufacturing Society, the shareholders unanimously agreed to the transfer of the business to the Wholesale Society. Details of the bargain having been settled and matters amicably arranged, these extensive Mills became the property of the Scottish Co-operative Wholesale Society in 1895.

Since then the Society has cleared the Mills of all old types of looms or machinery, and substituted in their place the most up-to-date appliances. The result has been evident in the reputation rapidly attained among Co-operative societies by the products of the Mills, Ettrick tweeds and blankets being held in high esteem throughout Co-operative Scotland. Quite recently, for the making of all classes of hosiery yarns, spinning machinery of the latest type was introduced, and a large proportion of the yarns used in the S.C.W.S. Hosiery Factory is procured from these Mills.



Ettrick Tweed and Blanket Mills, Selkirk.
Acquired 1895.



Soap Works, Grangemouth.

ESTABLISHED 1807

Soap Works, Grangemouth.

EARLY in 1896 the Directors decided to include the industry of soapmaking within the scheme of the Society's operations, and, suitable ground having been secured, the buildings shown on the opposite page were erected, and work commenced at Grangemouth Soap Works in October 1897.

The keen competition in this trade, the prejudice in favour of other soaps, and the difficulty of producing an article which would prove generally popular, seriously hampered the progress of this Department in its earlier years. Gradually, however, the productions rose in general esteem, until at the present time a very high percentage of retail societies' trade goes to Grangemouth. Apart from the ordinary soaps and cleansing preparations for household use, high-class toilet soaps now form an important branch of the manufactures. Extensive alterations and additions have been made at various times, and the Soap Works, equipped with the latest machinery and appliances, are in every respect thoroughly up to date.

Hosiery Factory, Leith.

(OLD DRESS SHIRT FACTORY.)

THE building (shown opposite) was erected for the manufacture of dress shirts—on a portion of the ground acquired with Junction Mill—work being commenced in December 1901.

In order to avoid smoky atmosphere, and obtain an abundant supply of water, the Laundry connected with the Factory was removed to Barrhead in 1904, and again, in 1909, to more suitable premises at Paisley. In the year 1912 it was decided to transfer the Factory also to that town, and the productions are now being manufactured and finished under one roof at Potterhill, Paisley.

The building has since been fitted for the manufacture of hose and half-hose, which formerly were made at the Hosiery Factory Shieldhall.



Hosiery Factory, Leith.
(OLD DRESS SHIRT FACTORY.)



Creamery and Margarine Factory, Bladnoch, Wigtownshire.

ESTABLISHED 1899

Creamery and Margarine Factory, Bladnoch, Wigtownshire.

TO cope with the demand for supplies of fresh butter, and also with a view to the manufacturing of margarine, the Creamery and Margarine Factory here shown was erected at Bladnoch, Wigtownshire, during 1899. At a later date an Auxiliary Creamery, situated at Whithorn in the same shire, was opened. Placed in the midst of a purely agricultural district, where the desirable adjuncts of clear atmosphere and absence of dust or smoke help the purity of the products, these Creameries have proved very successful.

Complete electrical installations have been fitted up, and the machinery is of the latest type. Consignments of the productions are forwarded direct to societies daily, as ordered. Extensive Piggeries have also been established.

Fish-Curing Works, Aberdeen.

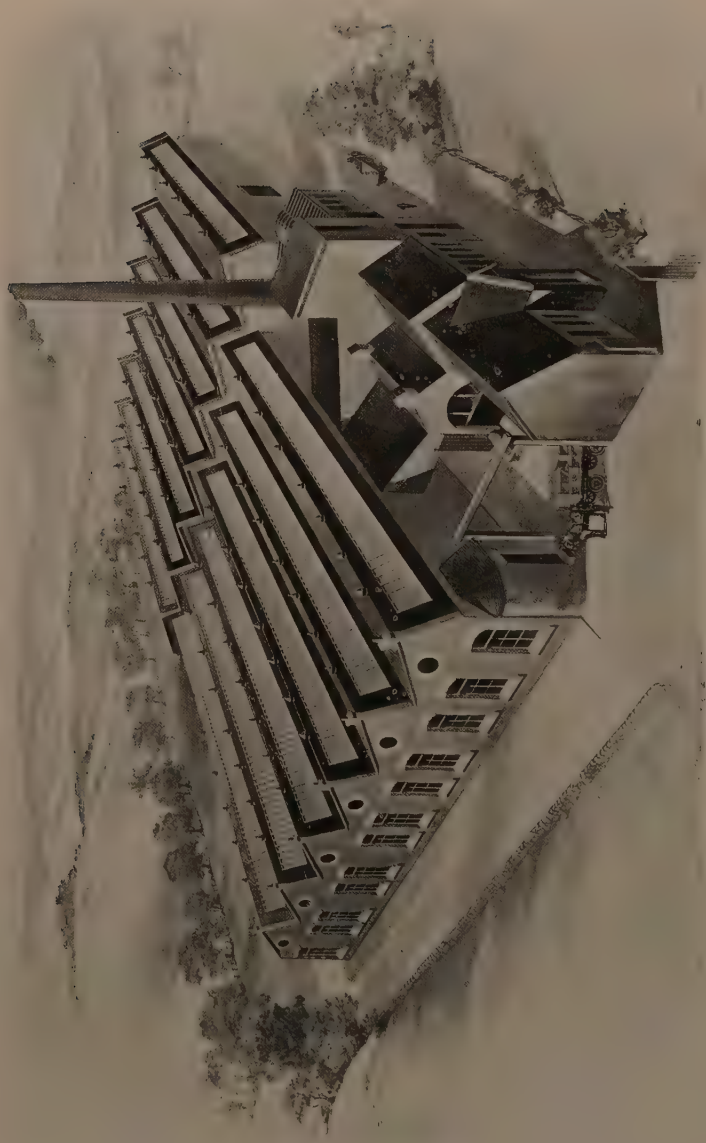
THE growing trade in fresh and cured fish led the Directors of the S.C.W.S. to consider the advisability of undertaking this industry, and, in 1899, Fish-Curing Works were started at Aberdeen, the largest fishing centre on the East Coast of Scotland. The original rented premises were soon found inadequate for the requirements of the Department, and, later, ground was leased from the Aberdeen Harbour Trust and the buildings shown on the opposite page erected.

From this Depot boats are engaged at Scalloway, Lerwick, and other ports, and the catch of these goes direct to the Curing Works. In addition to this, large purchases of fish are made daily at the public market. These are immediately transferred to the Wholesale's premises, cleaned, sorted, packed, and sent off so expeditiously as to be on sale in retail societies' shops all over Scotland the following morning. A very successful trade is now done, over 2,600 tons of fish being dealt with annually.

The rendering of cod liver oil is now assuming considerable importance, and at the Works a thoroughly up-to-date plant for this purpose has been fitted up. The oil thus extracted is taken up by the Society's Chemical Department, and, after being treated there, is sent out to societies in the form of emulsion.



Fish-Curing Works, Aberdeen.
ESTABLISHED 1899.



Dress Shirt Factory and Laundry, Potterhill, Paisley.

Dress Shirt Factory and Laundry, Potterhill, Paisley.

THIS industry was commenced in October 1901, at Leith, in a building erected for the purpose, on a site acquired with Junction Mill. A pure atmosphere and abundant water supply being necessary for the finishing of white goods, the Laundry was removed to Barrhead in 1904. In 1909 more suitable premises, known as Stonefield Mills, Potterhill, Paisley, were purchased, and the Laundry was removed there.

Three years later (1912) the Factory was also brought from Leith, and now the goods—dress shirts, collars, and fronts—are manufactured and finished in the building shown opposite.

While managed and financed by the S.C.W.S. Ltd., the Department is worked under an arrangement with the C.W.S. Ltd., Manchester, whereby profits or losses are allocated to each in proportion to purchases. It is understood that every possible support be given by the latter, and this has been loyally adhered to.

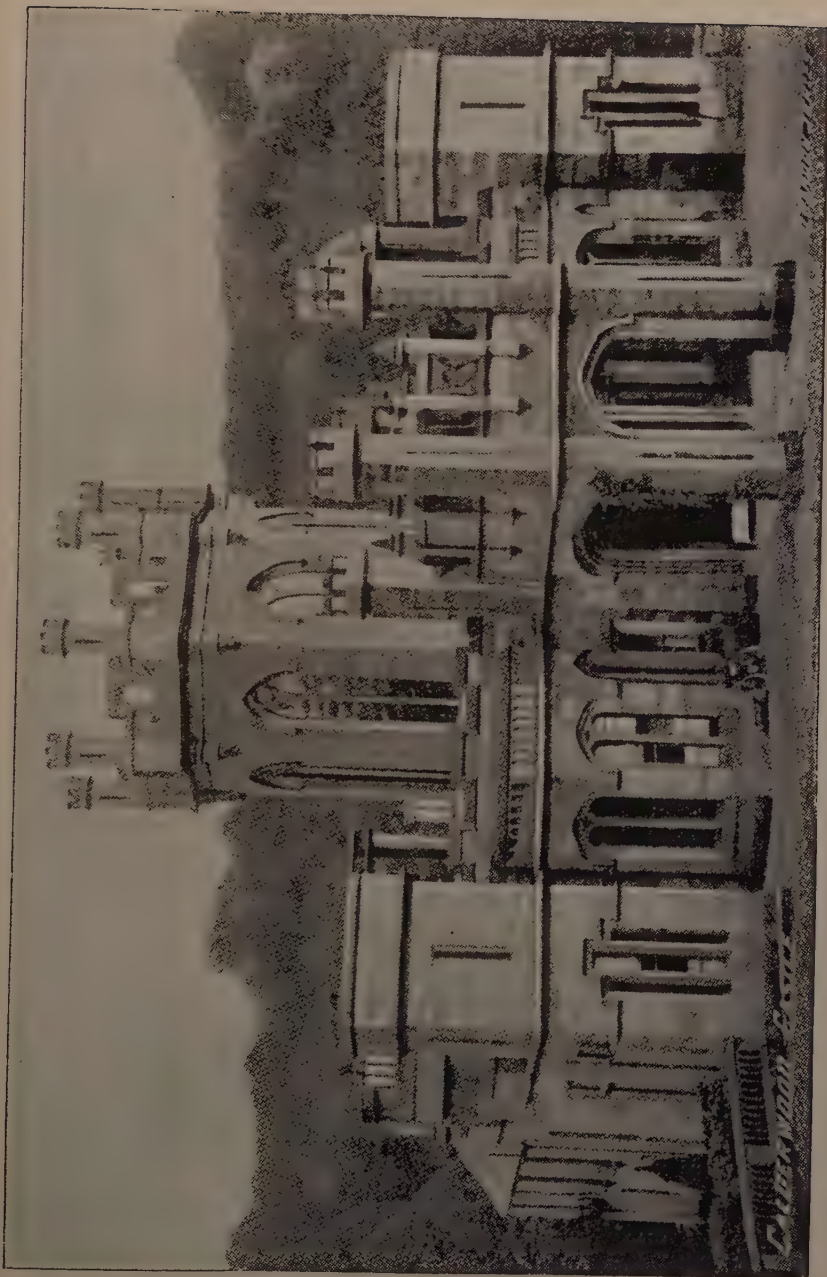
The vacated building in Leith is now occupied as an additional Factory for the manufacture of hose and half-hose.

Calderwood Castle and Estate, Lanarkshire.

BY virtue of powers entrusted to the Directors to acquire in Scotland (or in Ireland) such estates or lands as would be available for fruit-growing and general agriculture, the rich and beautiful estate of Calderwood, lying about eight miles east of Glasgow, passed in 1904 into possession of the Scottish Co-operative Wholesale Society.

The Estate extends to 1,113 acres, and includes the village of Maxwellton. About half of it is let as farms, and of the remainder 350 acres have already been devoted by the Society to farming and the cultivation of fruit, vegetables, flowers, and plants. One and a half acres have been laid out for the rearing of tomatoes under glass; and a rhubarb-house covering half an acre has been erected for growing the early or forced variety of that plant.

Self-contained cottages have been erected by the Society near the village of Maxwellton, and the capability of the Estate generally is receiving the careful attention of the Directors.



Calderwood Castle and Estate.
ACQUIRED 1904.

Chart showing Progress of the S.C.W.S.L., from Commencement

Yearly Sales

Year

Capital

1869	3174
1870	12542
1871	18009
1872	30931
1873	50435
1874	48981
1875	56750
1876	67218
1877	72568
1878	83173
1879	93076
1880	110179
1881	133713
1882	169428
1883	195396
1884	244186
1885	288945
1886	333653
1887	367309
1888	409668
1889	480622
1890	575322
1891	671108
1892	778494
1893	869756
1894	940835
1895	1134269
1896	1257317
1897	1286624
1898	1333077
1899	1437645
1900	1676763
1901	1929113
1902	2125133
1903	2314955
1904	2500063
1905	2780729
1906	2950620
1907	3059245
1908	3292015
1909	3346873
1910	3453627
1911	3838046
1912	4038913
1913	4468463

Sales

Capital

DECREASE IN CAPITAL

DECREASE IN SALES

1876 - 51 WEEKS

1881 - 53 WEEKS

1886 - 50 WEEKS

1887 - 53 WEEKS

1892 - 53 WEEKS

1898 - 53 WEEKS

1904 - 53 WEEKS

7531.026

7457.136

DECREASE IN SALES

DECREASE IN SALES

1910 - 53 WEEKS

3056.582

CHART SHOWING YEARLY SALES OF S.C.W.S. GROCERY DEPT., GLASGOW, FROM COMMENCEMENT.

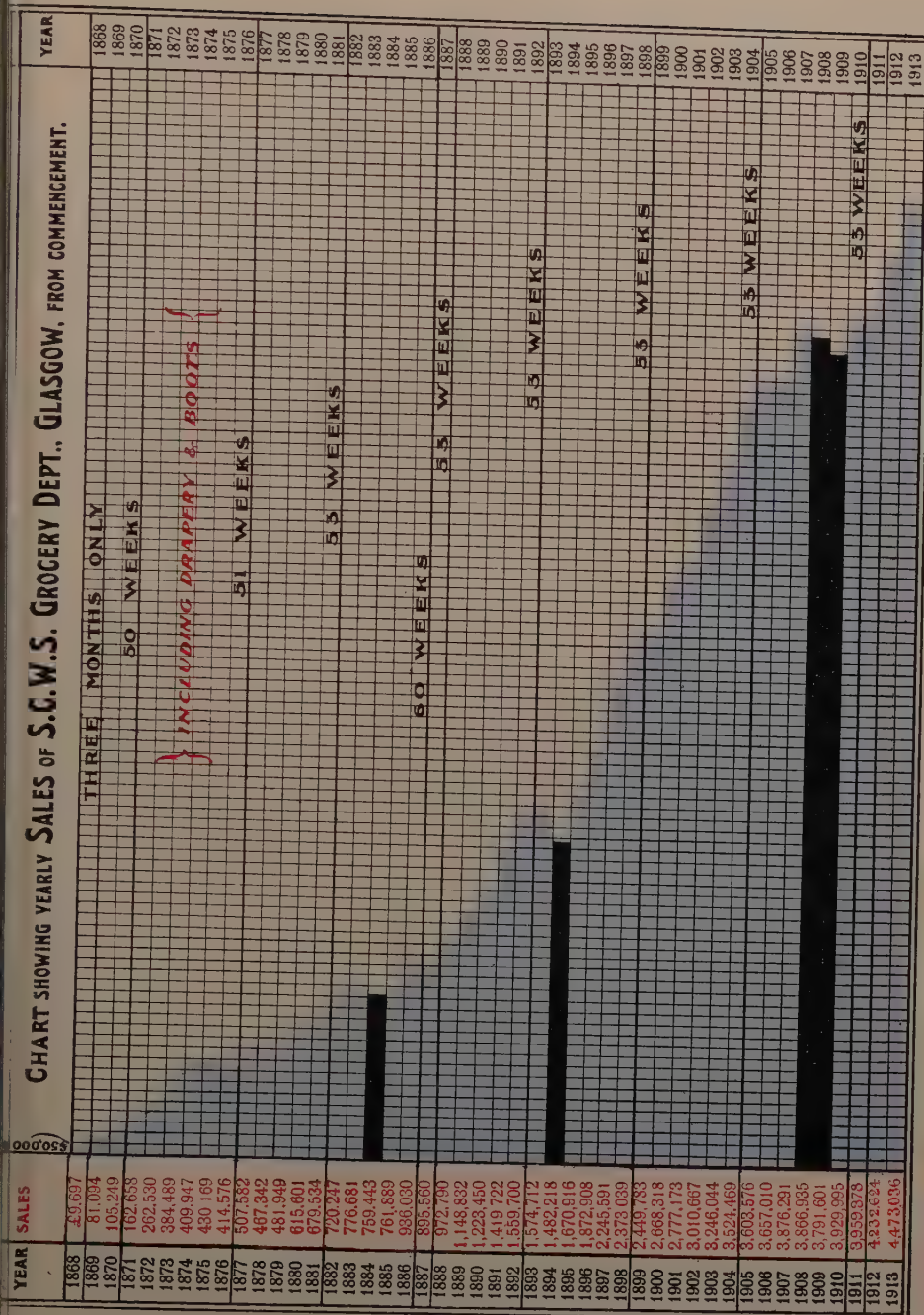
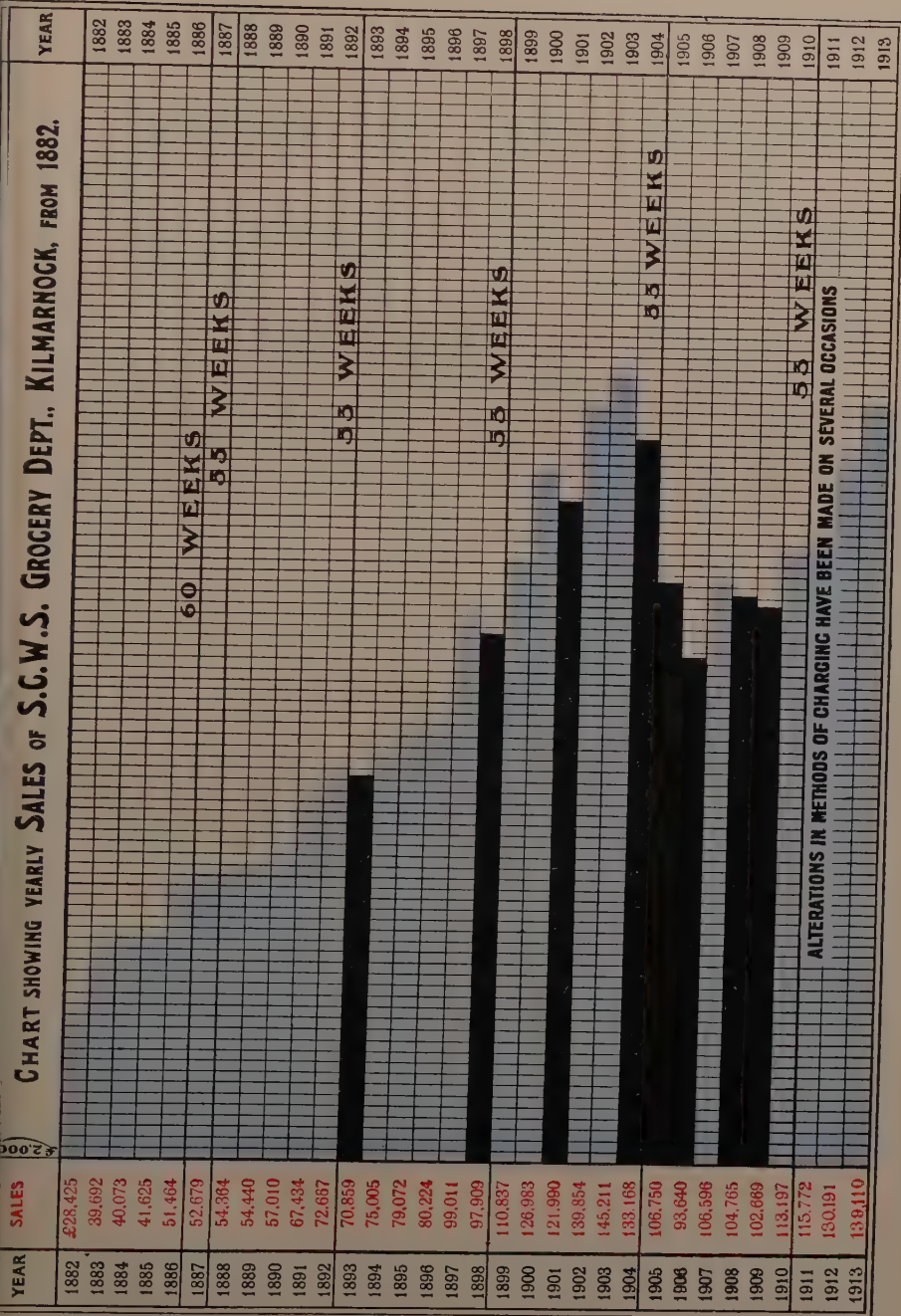
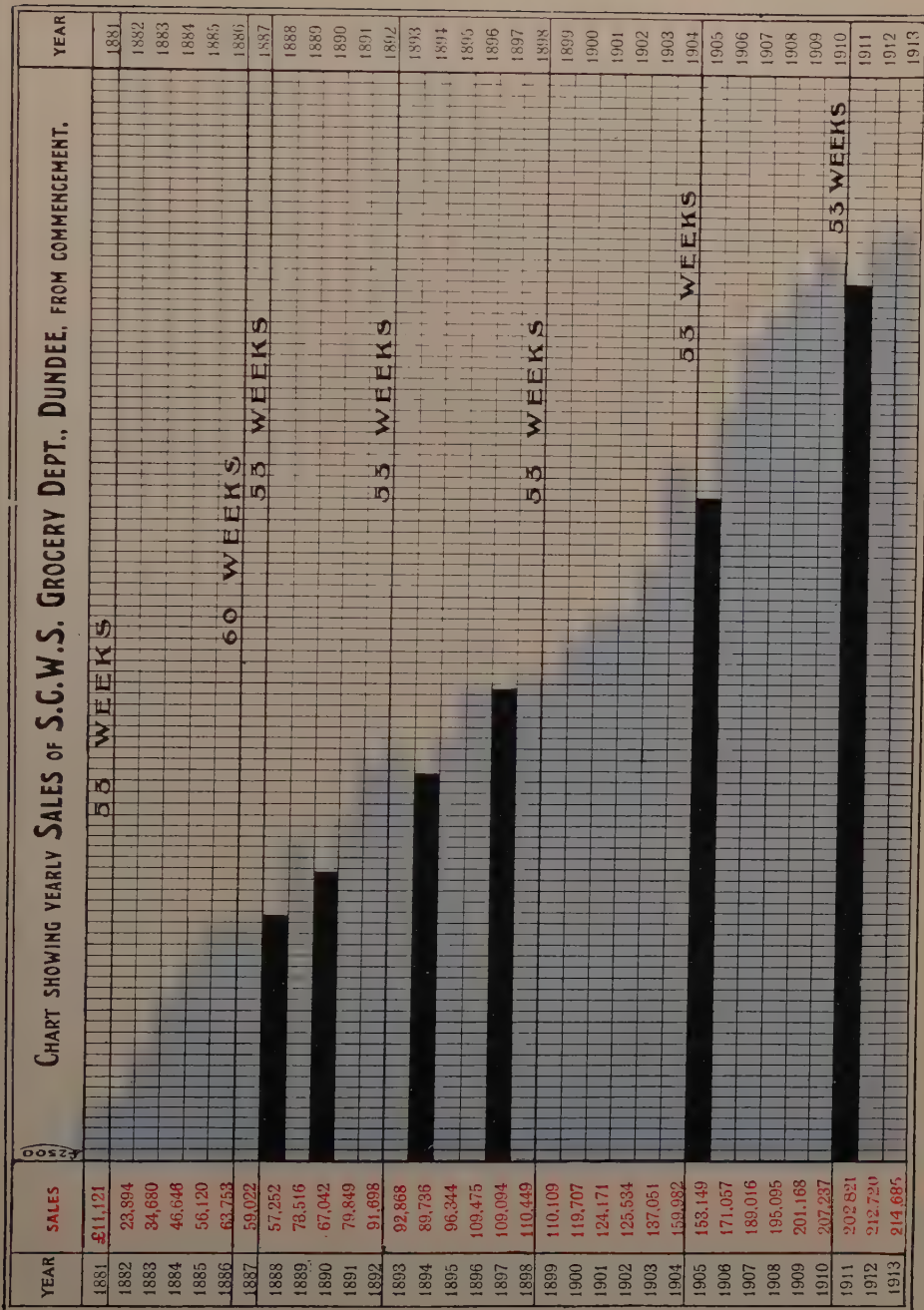


CHART SHOWING YEARLY SALES OF S.C.W.S. GROCERY DEPT., KILMARNOCK, FROM 1882.





192000

CHART SHOWING YEARLY SALES OF THE S.C.W.S. DRAPERY DEPARTMENT FROM 1882.

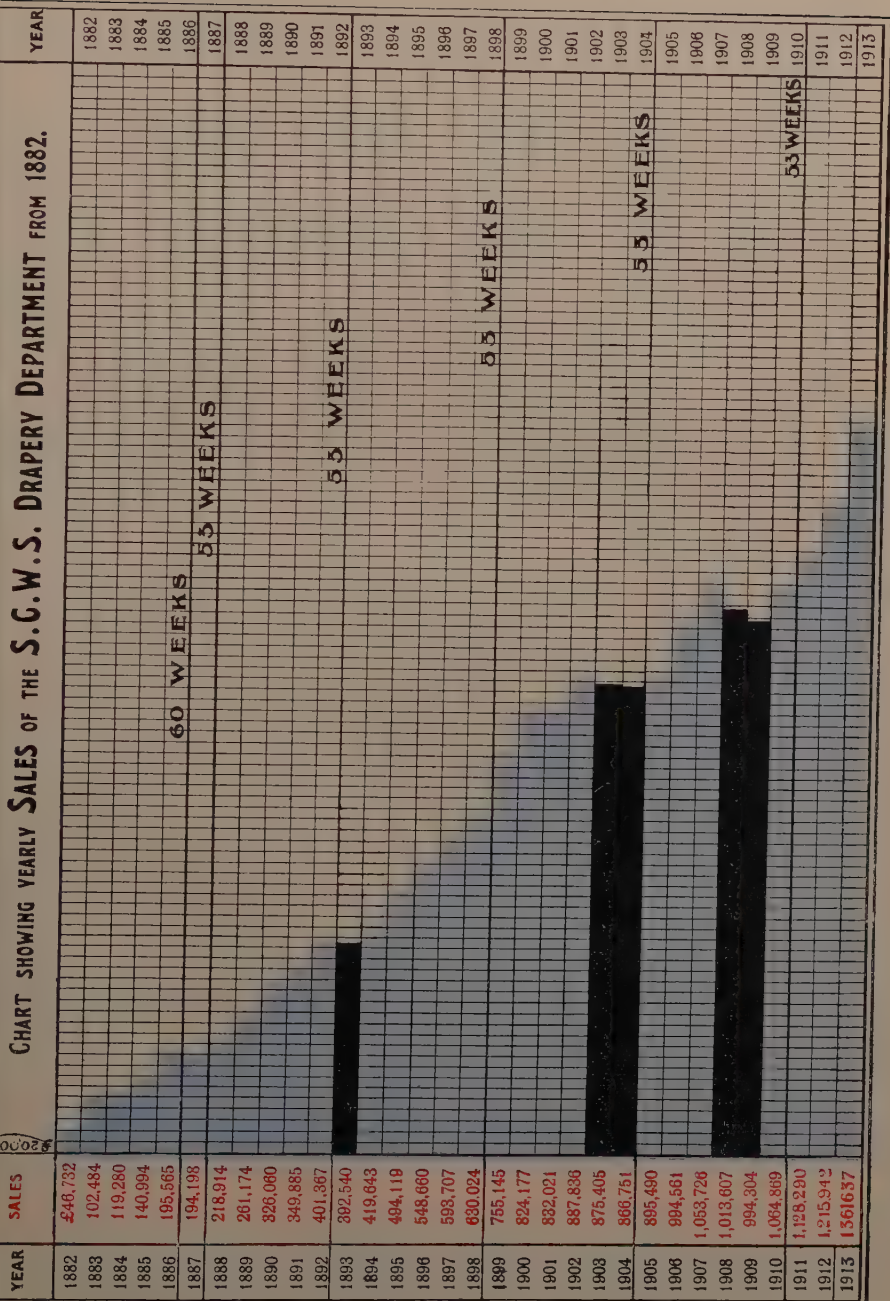
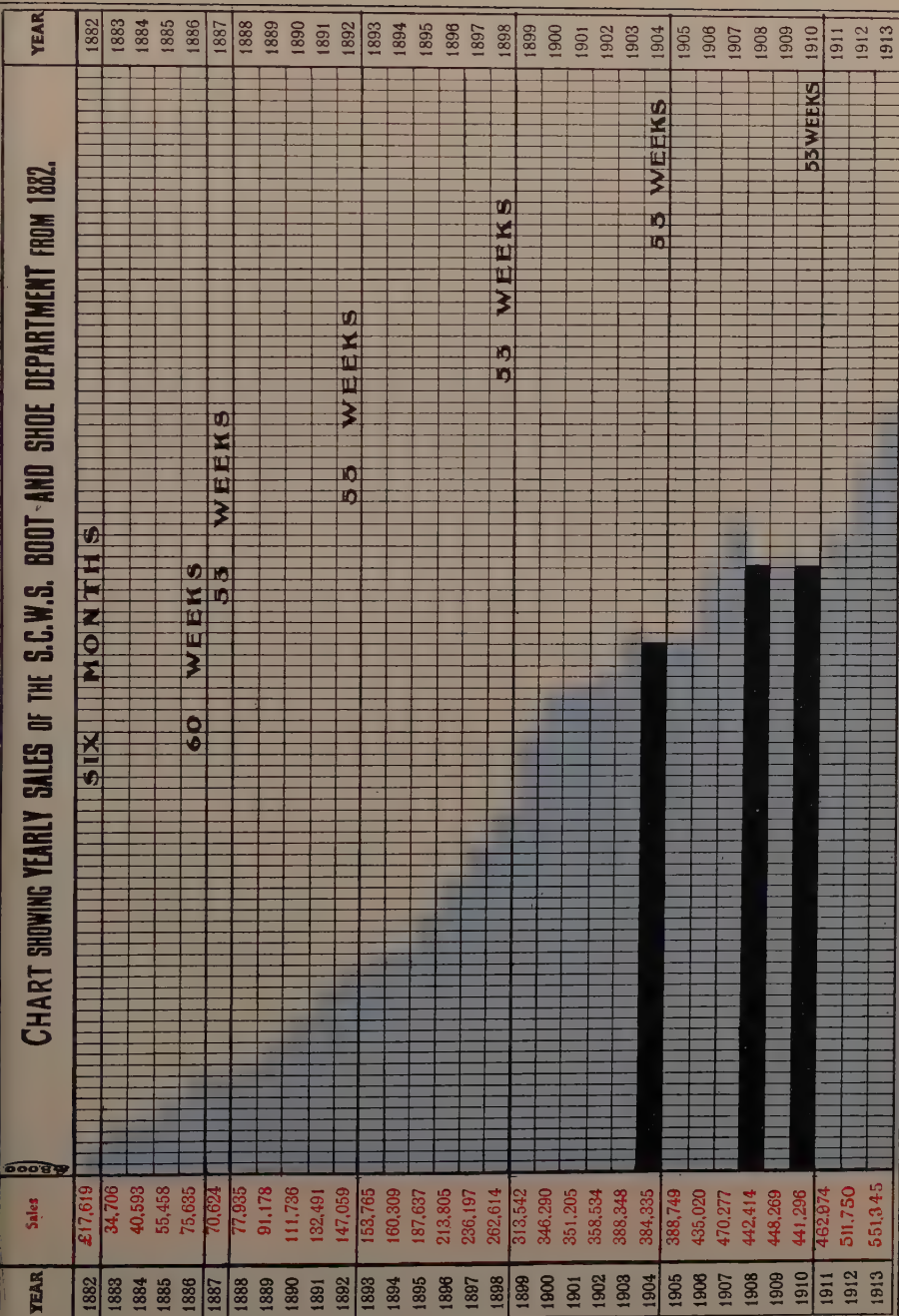
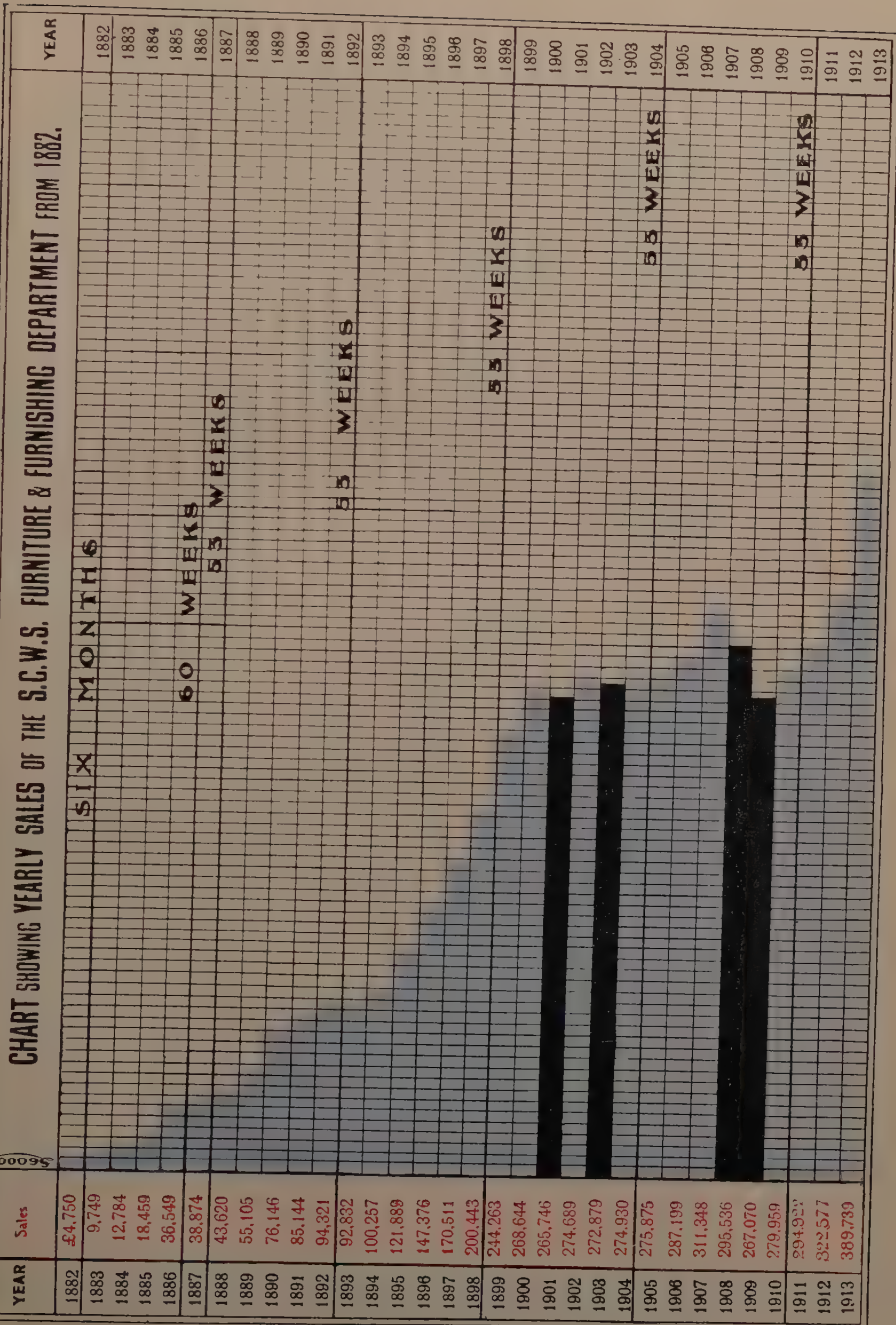


CHART SHOWING YEARLY SALES OF THE S.C.W.S. BOOT AND SHOE DEPARTMENT FROM 1882.



56000

CHART SHOWING YEARLY SALES OF THE S.C.W.S. FURNITURE & FURNISHING DEPARTMENT FROM 1882.



[SPECIMEN.]

WEEKLY STATEMENT OF ACCOUNT.

9TH WEEK.
163RD QUARTER.

LEDGER FOLIO, 929.
95, MORRISON STREET,
GLASGOW, May 29th, 1909.

The A. B. C. Co-operative Society Limited.

Dr. To The Scottish Co-operative Wholesale Society Limited. Cr.

GOODS.			CASH AND CREDITS.			
Date.	Amount of each Invoice.	Balance last Statement.	Date.	Cash.	Credit.	Totals.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.	£ s. d.
		298 7 2				
May 21....	0 4 3	....	May 24..	....	0 5 0	....
" 24....	18 11 7	....	" 24..	....	1 0 0	....
" 24....	29 0 8	....	" 25..	....	0 12 9	....
" 24....	32 4 0	....	" 25..	....	0 12 10	....
" 24....	0 17 7	....	" 26..	....	0 5 6	....
" 24....	4 10 0	....	" 26..	....	0 1 0	....
" 24....	4 4 0	....	" 26..	....	1 3 6	....
" 24....	3 2 6	....	" 26..	....	2 7 0	....
" 25....	0 6 6	....	" 26..	....	0 12 9	....
" 25....	0 8 3	....	" 26..	....	0 12 9	....
" 25....	0 10 10	....	" 27..	....	0 14 9	....
" 25....	0 8 3	....	" 27..	....	0 10 0	....
" 25....	1 5 0	....	" 27..	....	0 15 6	....
" 25....	0 10 11	....	" 27..	....	10 11 1	....
" 25....	59 16 9	....	" 27..	....	0 15 6	....
" 25....	0 11 3	....	" 27..	....	1 12 0	....
" 25....	7 3 5	....				22 11 11
" 26....	2 10 6	....	" 28..	298 7 2	....	298 7 2
" 26....	4 17 6	....				
" 26....	0 15 2	....				
" 27....	0 6 6	....				
" 27....	0 9 2	....				
" 27....	17 10 0	....				
" 27....	0 18 0	....				
" 27....	3 10 6	....				
" 27....	5 13 8	....				
" 27....	12 11 1	....				
" 27....	4 18 7	....				
" 28....	5 3 6	....				
" 28....	0 12 9	....				
" 28....	0 1 10	....				
" 28....	2 14 9	....				
" 28....	1 8 6	....				
" 28....	27 12 8	....				
		255 10 5				
	To balance	....			By balance	282 18 6
	£	553 17 7			£	553 17 7

If the above Statement differs from your Books, we shall be glad if you will point out the difference at once.

Terms of Membership.

EXCERPT FROM SOCIETY'S RULES.

ADMISSION OF MEMBERS AND APPLICATION FOR SHARES.

The Society shall consist of such Co-operative Societies registered under the Industrial and Provident Societies Act, or any employé of this Society who is over twenty-one years of age, as have been admitted by the Committee, subject to the approval of a general meeting of the Society; but no society trafficking in intoxicating liquors shall be eligible for membership in the Society, and each admission must be entered in the minute book of the Society. Every application for membership, except in the case of employés, must be sanctioned by a resolution of a general meeting of any society making such application, and the same must be made in the form as on next page, said form to be duly attested by the signature of the president, secretary, and three of the members thereof, and stamped with such society's seal. Every society making application shall state the number of its members, and take up not less than one share for each member, and shall increase the number annually as its members increase, in accordance with its last return to the Registrar; but no member other than a society registered under the Industrial and Provident Societies Act shall hold an interest in the funds exceeding £50. It shall be in the option of any society to apply for shares in excess of their individual membership at any time; such applications shall be signed by the president, secretary, and three members of committee, but the granting of such excess shares shall be at the discretion of the Committee of this Society.

Any employé applying for membership must apply for not less than five shares.

CAPITAL: HOW PAID UP.

The capital of the Society shall be raised in shares of twenty shillings each, which shall be transferable only; every member—society or employé—on admission, shall pay the sum of not less than one shilling on each share taken up, and the unpaid portion of the shares may be paid by dividends, or bonus, and interest; but any member may pay up shares in full or in part at any time.

APPLICATION FORM.

*Whereas, by a resolution of the.....Co-operative Society Limited, passed at a general meeting held on the....day of....., it was resolved to take up.....shares (being one share of twenty shillings for each member), said shares being transferable, in the **Scottish Co-operative Wholesale Society Limited**, and to accept the same on the terms and conditions specified in the Rules. Executed under the seal of the society on the....day of..... Attested by*

.....
.....
..... } *Three Members.*

BENEFITS DERIVED FROM MEMBERSHIP.

(a) The liability of the member is limited, each member being only responsible for the value of the shares held.

(b) Members receive double the rate of dividend on purchases paid to non-members.

(c) Share capital is paid 5 per cent. per annum.

(d) Members have a share in the management of the Wholesale in proportion to the amount of goods bought, as each society has one vote in right of membership, one for the first £1,500 worth of goods bought, and one other additional vote for every complete £3,000 of purchases thereafter.

These advantages, added to the special benefits secured by the leading position of the Wholesale, will, we trust, induce societies as yet non-members to carefully reconsider the question, and take the necessary steps to secure to their members the full benefits of co-operative distribution.

CORRESPONDENCE.

All letters must be addressed to the Society, and not to individuals. Addressed envelopes are supplied at cost price. Separate slips ought to be used for the different departments—the Accountant's, Grocery and Provision, Drapery, Boot and Shoe, Furniture. The slips can all be enclosed in the one envelope. Attention to this simple rule will greatly facilitate the despatch of goods and ensure promptitude in answering inquiries; it will also aid in the classification of the letters for reference in any case of irregularity or dispute.

Cash Remittance.

Cheques must be made payable to the Society.

LIST OF BRANCHES OF THE UNION BANK OF SCOTLAND LIMITED.

HEAD OFFICES:—GLASGOW, INGRAM STREET; EDINBURGH, GEORGE STREET.
LONDON OFFICE:—62, CORNHILL, E.C.

BRANCHES:

Aberdeen, Castle Street.	Edinburgh, Morningside.	Kilmarnock, Riccarton.
" Fishmarket.	" Murrayfield.	Kincardine.
" George Street.	" Newington.	Kirkcaldy.
" Holburn.	" North Merchiston.	Kirkwall.
" Torry.	" Norton Park.	Kirriemuir.
" West End.	" Piershill.	Ladybank.
Aberfeldy.	" S'th Morningside.	Largs.
Aberlour, Strathspey.	Edzell.	Larkhall.
Alloa.	Elgin.	Leith.
Alva.	Ellon.	" Leith Walk.
Ardrishaig.	Errol.	Lerwick.
Ardrossan.	Fochabers.	Leslie.
Auchterarder.	Forfar.	Lochgelly, Fifeshire.
Auchtermuchty.	Fraserburgh.	Lochgilphead.
Ayr.	Galston.	Macduff.
Ballater.	Gatehouse.	Maybole.
Banchory.	Girvan.	Mearns (sub to Barrhead).
Banff.	Glasgow, Anderston.	Millport.
Barrhead.	" Battlefield.	Moffat.
Barrhill.	" Bridgeton Cross.	Moniaive.
Bathgate.	" Buchanan Street.	Motherwell.
Beith.	" Charing Cross.	New Aberdour (open on Mon-
Blair-Atholl (sub to Pitlochry).	" Cowcaddens.	days and Fridays — sub to
Blairgowrie.	" Dennistoun.	Rosehearty).
Bo'ness.	" Eglinton Street.	New Pitsligo.
Braemar.	" Govan.	Paisley.
Brechin.	" Hillhead.	" Wellmeadow.
Bridge of Allan.	" Hope Street.	Perth.
Buckie, Banffshire.	" Hyndland.	Peterhead.
Campbeltown.	" Kinning Park.	Pitlochry.
Castle-Douglas.	" Maryhill.	Port-Glasgow.
Clydebank.	" Partick.	Portknockie, Banffshire.
Coatbridge.	" Pollokshaws East.	Portsoy.
Coupar-Angus.	" St. Vincent Street.	Renfrew.
Crieff.	" Shawlands.	Rosehearty.
Cullen.	" Shettleston.	St. Margaret's Hope, Orkney.
Dalbeattie.	" Springburn.	Scalloway, Shetland (sub to
Dalry, Galloway.	" Stockwell.	Lerwick).
Darvel (sub to Galston).	" Tollcross.	Stewarton.
Doune.	" Tradeston.	Stirling.
Dumbarton.	" Trongate.	Stonehouse.
Dumfries.	" Union Street.	Strachur, Lochfyne (open on
Dunblane.	Glencraig, Fife (open on Mon-	Thursdays—sub to Inveraray).
Dundee.	days, Wednesdays, and Satur-	Stranraer.
Dunfermline.	days — sub to Lochgelly).	Strathaven.
Dunkeld.	Gourock.	Stromness.
Dunning.	Greenock.	Stronsay (open during fishing
Dunoon.	Hamilton.	season—sub to Kirkwall).
Edinburgh, Blackhall.	Helensburgh.	Tarbert, Lochfyne.
" Chambers Street.	Huntly.	Tarland.
" Golden Acre.	Inveraray.	Thornhill.
" Gorgie Markets	Inverness.	Thornton, Fife (open on Mon-
(open on Tuesdays	Inverurie.	days and Market Days—sub
and Wednesdays—	Irvine.	to Kirkcaldy).
sub to Haymarket).	Johnstone.	Tillicoultry.
" Haymarket.	Keith.	Troon.
" Hunter Square.	Killin.	Turrieff.
" Lothian Road.	Kilmarnock.	Wick.

STATEMENT SHOWING THE PROGRESS OF THE SOCIETY FROM ITS COMMENCEMENT IN SEPTEMBER, 1868, TO DATE.

Period.	Number of Shares Subscribed by Societies.	Number of Shares Subscribed by Employés.	Share Capital paid up.	Deposits, including Reserve and Insurance Funds.	Net Sales.	Increase over Previous Period.	Rate per cent.	Expenses.	Rate per £ of Sales.
			£	£	£ s. d.	£ s. d.		£ s. d.	d.
2 Years ended November, 1870	*591	....	2,668	9,875	196,041 1 11	....	....	2,738 15 2	8·3
5 " " 1875	+27,112	....	11,765	44,985	1,649,795 7 1	1,453,764 5 2	....	24,541 1 9	3·5
5 " " October, 1880	41,584	....	19,159	91,020	3,132,660 6 7	1,472,864 19 6	89·2	50,422 9 2	4·1
5 " " 1885	70,066	....	34,257	254,688	6,078,941 15 0	2,956,281 8 5	94·6	109,185 9 0	4·3
5½ " " December, 1890	+117,664	....	84,454	490,868	10,330,405 1 10	4,301,463 6 10	70·7	206,108 0 10	4·7
5 " " 1895	\$171,985	8,099	169,906	964,363	15,574,412 2 4	5,194,007 0 6	50·0	350,127 5 1	5·4
5 " " 1900	252,276	6,481	254,076	1,422,689	23,998,555 13 11	7,894,173 11 7	50·2	534,273 3 2	5·4
5 " " 1905	345,226	12,271	352,731	2,427,998	31,896,361 2 11	8,497,775 9 0	36·3	759,511 1 10	5·7
5 " " 1910	415,526	15,704	426,930	3,023,697	37,470,064 6 0	5,573,703 3 1	17·4	916,350 15 9	5·8
1 Year " 1911	431,045	16,076	443,450	3,394,566	7,851,079 10 0	112,920 13 7	1·5	199,900 11 11	6·2
1 " " 1912	439,969	16,684	453,353	3,585,560	8,391,258 5 2	540,178 15 2	7·0	205,636 8 8	6·0
1 " " 1913	451,041	17,324	465,711	4,002,752	8,964,033 12 3	572,775 7 1	6·8	216,255 13 5½	5·8
6 Months " June 27, 1914	456,806	18,339	472,096	4,272,163	4,523,068 17 3	137,430 19 7	4·3	114,434 13 4½	6·1
Totals to June 27, 1914..	456,806	18,339	472,096	4,272,163	159,496,707 2 3	....	....	3,689,485 19 2	5·5

* 45 each.

† 10s. each.

‡ 15s. each.

§ 20s. each.

STATEMENT SHOWING THE PROGRESS OF THE SOCIETY FROM ITS COMMENCEMENT IN
SEPTEMBER, 1868, TO DATE—*continued*.

Period.	Net Profit.	Average Dividend.	RESERVE AND INSURANCE FUNDS.			Depreciation on Buildings and Plant.
			Added.	Withdrawn.	Amount of Funds.	
	£ s. d.	d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
2 Years ended November, 1870	3,770 17 0	4	486 5 11	....	486 5 11	250 0 5
5 " " 1875	32,798 8 0	4½	2,793 1 2	823 14 3	2,402 12 10	2,315 9 10
5 " " October, 1880	68,403 16 5	4½	7,782 14 0	1,780 16 10	8,404 10 0	4,516 19 2
5 " " 1885	144,643 4 0	5½	19,594 8 7	6,684 14 0	21,254 4 7	11,277 8 6
5½ " " December, 1890	289,518 7 11	6½	42,599 12 10	10,971 7 5	52,882 10 0	27,299 3 10
5 " " 1895	495,060 10 1	6½	76,710 8 7	50,661 15 6	78,981 3 1	130,129 16 8
5 " " 1900	932,897 11 4	7½	161,697 12 7	27,193 11 6	213,425 4 2	247,901 18 1
5 " " 1905	1,230,292 6 7	8	233,427 14 6	39,028 15 8	407,824 3 0	275,605 4 4
5 " " 1910	1,378,700 12 9	8	249,251 8 11	43,012 0 5	609,093 11 6	309,484 13 2
1 Year " 1911	308,890 10 10	8½	87,519 19 6	30,025 17 4	665,567 13 8	65,652 5 0
1 " " 1912	301,154 1 6	8	60,662 4 10	21,576 11 3	705,673 7 3	53,552 11 7
1 " " 1913	340,780 8 2	8	67,538 14 10	39,112 17 8	734,099 4 5	78,022 7 9
6 Months " June 27, 1914	164,895 15 6	8	68,346 5 1	45,262 18 8	757,182 10 10	35,106 11 11
Totals to June 27, 1914	5,691,726 10 1	..	1,078,920 11 4	321,138 0 6	757,182 10 10	1,231,014 10 3

GLASGOW GROCERY AND PROVISION DEPARTMENTS.

Period.	NET SALES.										Rate Per £ of Sales.	Stocks.
	Drapery and Books.	Dundee.	Kilmarnock.	Glasgow.	Total.	Expenses.		Net Profit.	Rate Per £ of Sales.			
						£ s. d.	£ s. d.			£ s. d.			£ s. d.
2½ Years ended Nov., 1870. ....	.....	.....	.....	196,041 1 11	196,041 1 11	2,738 15 2	3 4	8,770 17 0	4 6	9,060		
5 " " 1875. ....	.....	.....	.....	1,649,795 7 1	1,649,795 7 1	24,541 1 9	3 6	82,798 8 0	4 7	28,400		
5 " " Oct., 1880.	203,990 6 2	.....	.....	2,487,052 12 5	2,781,042 18 7	45,425 19 0	3 9	60,102 10 4	5 1	43,190		
5 " " 1885.	155,347 8 11	21,507 10 0	12,982 1 4	3,697,796 1 6	3,887,633 1 9	60,284 9 3	3 7	80,069 5 7	4 9	28,190		
5½ " " Dec., 1890. ....	.....	.....	.....	5,176,664 9 2	5,176,664 9 2	75,677 13 5	3 5	121,135 11 2	5 6	68,000		
5 " " 1895. ....	.....	.....	.....	7,707,270 3 11	7,707,270 3 11	120,547 16 8	3 7	189,795 13 3	5 9	80,424		
5 " " 1900. ....	.....	.....	.....	11,609,641 11 0	11,609,641 11 0	164,998 13 4	3 4	340,881 12 6	7 6	85,803		
5 " " 1905. ....	.....	.....	.....	16,161,981 12 3	16,161,981 12 3	220,670 13 4	3 2	460,604 17 8	6 8	108,410		
5 " " 1910. ....	.....	.....	.....	19,121,835 9 1	19,121,835 8 1	265,420 5 8	3 8	556,348 14 0	6 9	124,716		
1 Year " 1911. ....	.....	.....	.....	3,950,378 11 7	3,950,378 11 7	56,892 4 7	3 4	129,998 1 3	7 8	166,897		
1 " " 1912. ....	.....	.....	.....	4,232,624 15 5	4,232,624 15 5	59,793 9 2½	3 4	134,488 14 4½	7 0	150,014		
1 " " 1913. ....	.....	.....	.....	4,473,036 3 8	4,473,036 3 8	62,431 2 11½	3 8	131,969 4 8½	7 1	178,729		
6 Months " June 27, 1914. ....	.....	.....	.....	2,263,489 5 2	2,263,489 5 2	32,351 11 8½	3 43	58,811 7 8½	6 28	187,356		
Totals	449,397 15 1	21,507 10 0	12,982 1 4	82,786,587 3 2	83,220,384 9 7	1,191,712 15 0½	3 43	2,390,770 1 5½	6 66	....		

GROCERY DEPARTMENT, LEITH.

Period.		Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Stocks.	
		£	s. d.	£	s. d.	d.		£	s. d.	d.		£	
4 Years ended October,	1880	341,617	8 0	4,996	10 2	3·5		8,301	6 1	5·8		8,410	
5 "	" 1885	1,299,895	19 6	18,266	10 5	3·3		34,039	9 9	6·2		29,750	
5½ "	" December, 1890	2,717,040	17 4	39,141	1 0	3·4		68,339	15 7	6·0		34,600	
5 "	" 1895	3,646,429	13 4	52,328	11 3	3·4		91,462	2 7	6·0		31,647	
5 "	" 1900	4,650,166	9 11	60,830	0 7	3·1		139,842	11 0	7·2		38,279	
5 "	" 1905	6,283,990	18 5	82,240	19 1	3·1		197,277	13 6	7·5		46,954	
5 "	" 1910	7,324,710	2 7	114,753	18 6	3·7		238,942	14 8	7·9		33,255	
1 Year	" 1911	1,543,005	11 9	24,483	2 2	3·8		54,788	9 8	8·5		41,187	
1 "	" 1912	1,599,808	7 8	25,236	2 3½	3·8		51,167	8 6½	7·6		44,564	
1 "	" 1913	1,656,769	16 3	26,952	19 2	3·9		51,823	16 5	7·5		66,934	
6 Months	" June 27, 1914	811,017	5 6	13,925	0 11½	4·12		22,002	18 6½	6·51		57,630	
	Totals.....	31,874,452	10 3	463,154	15 7	3·48		957,993	6 4	7·21		....	

GROCERY DEPARTMENT, KILMARNOCK.

CC

Period.		Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Stocks.	
		£	s. d.	£	s. d.	d.		£	s. d.	d.		£	
34	Years ended October, 1885	136,835	15 11	2,952	19 11	5·1		3,151	1 3	5·5		2,300	
5½	" " December, 1890	269,960	11 5	4,309	19 4	3·7		9,037	4 2	8·0		2,400	
5	" " " 1895	365,040	0 8	7,180	4 11	4·7		12,962	11 3	8·5		2,030	
5	" " " 1900	514,966	15 3	10,467	16 8	4·8		17,185	4 3	8·0		3,848	
5	" " " 1905	646,975	18 6	11,485	4 4	4·2		22,192	16 10	8·2		5,135	
5	" " " 1910	520,869	17 4	11,091	3 5	5·1		15,262	1 6	7·0		2,994	
1	Year " " 1911	115,772	0 3	2,458	0 6	5·1		4,052	0 5	8·4		4,266	
1	" " " 1912	130,191	0 9	2,593	0 11	4·78		3,952	10 6	7·28		3,609	
1	" " " 1913	139,109	18 1	2,855	18 8	4·92		4,383	0 5	7·56		4,508	
6	Months " June 27, 1914	65,201	6 6	1,406	7 4	5·17		902	4 0	3·32		4,691	
Totals.....		2,904,923	4 8	56,800	16 0	4·69		93,080	14 7	7·69		....	

GROCERY DEPARTMENT, DUNDEE.

Period.	Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Stocks.
	£	s. d.	£	s. d.	d.		£	s. d.	d.		£
3½ Years ended October, 1885	150,955	18 1	3,436	7 9	5·4		1,628	4 2	2·5		2,890
5½ " " December, 1890	320,587	3 5	5,614	14 0	4·2		5,035	2 10	3·7		4,070
5 " " " 1895	450,497	14 8	6,239	6 5	3·3		11,080	15 11	5·9		2,260
5 " " " 1900	558,835	10 6	6,563	2 1	2·8		15,747	19 6	6·7		1,853
5 " " " 1905	719,789	10 1	7,382	11 6	2·4		23,288	5 10	7·7		3,361
5 " " " 1910	963,574	18 9	10,456	8 3	2·6		31,675	9 5	7·9		4,026
1 Year " " 1911	202,821	2 8	2,562	14 2	3·0		7,339	15 5	8·7		3,723
1 " " " 1912	212,720	17 8	2,529	2 0	2·85		6,168	8 8	6·96		4,120
1 " " " 1913	214,685	12 8	2,502	2 6	2·79		7,285	3 9	8·14		4,448
6 Months " June 27, 1914	104,371	7 6	1,320	12 4	3·03		3,417	15 11	7·86		4,122
Totals.....	3,898,839	16 0	48,607	1 0	2·99		112,667	1 5	6·93		....

DRAPERY DEPARTMENT.

Period.	Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Stocks.
	£	s. d.	£	s. d.	d.		£	s. d.	d.		£
*3½ Years ended October, 1885	529,694	8 2	20,815	4 5	9½		20,314	11 1	9·2		35,990
5½ " " December, 1890	1,195,918	8 3	50,893	9 7	10·1		50,920	4 4	10·2		64,000
5 " " " 1895	2,057,557	6 1	97,333	9 6	11·3		79,958	18 8	9·3		103,971
5 " " " 1900	3,351,714	18 11	156,926	2 11	11·2		146,985	18 8	10·5		149,209
5 " " " 1905	4,357,505	3 11	236,516	14 0	13·0		142,977	7 9	7·8		150,550
5 " " " 1910	5,121,068	18 11	280,879	4 5	13·1		164,989	10 1	7·7		163,568
1 Year " " 1911	1,128,290	3 1	62,703	11 1	13·3		42,479	8 4	9·0		146,260
1 " " " 1912	1,215,942	6 1	63,738	16 5	12·58		55,332	13 6	11·04		156,633
1 " " " 1913	1,361,637	5 3	65,421	3 10	11·53		77,031	13 2	13·58		163,982
6 Months " June 27, 1914	697,489	1 4	35,251	7 6	12·31		35,146	6 7	12·27		168,170
Totals.....	21,006,812	15 0	1,069,959	3 8	12·22		816,736	12 2	9·33		....

* Includes Boots and Furniture to 1884.

BOOT AND SHOE DEPARTMENT.

Period.	Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Stocks.
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£
1 Year ended October, 1885	55,467	0 1	1,602	18 5	6-9		2,481	18 3	10-7		11,520
5½ Years " December, 1890	427,110	9 1	15,177	13 2	8-5		10,991	17 9	6-1		14,960
5 " " 1895	781,264	3 8	31,492	10 8	9-6		23,802	16 7	7-3		34,754
5 " " 1900	1,372,450	4 4	53,697	13 5	9-3		37,303	11 3	6-5		66,107
5 " " 1905	1,871,172	13 4	78,858	5 9	10-1		51,891	19 3	6-6		88,035
5 " " 1910	2,237,278	17 5	94,993	7 7	10-2		64,623	2 6	6-9		92,570
1 Year " " 1911	462,974	0 4	20,909	1 2	10-8		12,357	15 2	6-4		95,739
1 " " 1912	511,750	18 5	21,422	11 2	10-05		16,962	4 5	7-95		81,999
1 " " 1913	551,345	12 7	23,649	10 1	10-29		18,242	18 0	7-94		124,048
6 Months ended June 27, 1914	296,918	16 1	13,181	0 0	10-65		10,674	1 1	8-62		122,906
Totals.....	8,567,732	15 4	354,984	11 5	9-94		249,332	4 3	6-98		....

FURNITURE AND FURNISHING DEPARTMENT.

Period.		Net Sales.		Expenses.		Rate per £ of Sales.		Net Profit.		Rate per £ of Sales.		Stocks.
		£	s. d.	£	s. d.	d.		£	s. d.	d.		
1 Year ended October,	1885	18,459	11 6	1,285	5 9	16·7		431	3 11	5·6		£
5½ Years "	December, 1890	250,296	11 9	15,793	1 2	15·1		11,842	11 11	11·3		5,600
5 "	"	494,445	18 0	35,005	5 8	16·9		22,516	2 0	6·1		13,600
5 "	"	1,031,234	6 10	80,789	15 0	18·8		39,502	7 11	9·1		20,509
5 "	"	1,364,121	12 3	122,356	14 10	21·5		27,067	12 8	4·7		43,758
5 "	"	1,441,114	7 11	138,756	7 11	23·1		35,767	12 7	5·9		51,046
1 Year "	"	294,921	19 5	29,951	18 3	24·4		6,121	18 5	5·0		58,275
1 "	"	322,577	11 11	30,661	13 2	22·81		9,878	9 2	7·35		47,918
1 "	"	389,739	1 2	32,443	1 3	19·97		16,235	2 1	10·00		59,032
6 Months ended June 27, 1914		217,373	17 10	16,938	18 6½	18·75		9,778	7 4½	10·79		63,371
Totals.....		5,824,284	18 7	504,032	1 6½	20·77		179,141	8 0½	7·38		69,919
												

TAILORING FACTORY.

Period.	Transfers.	Production.	Expenses on Production.		Rate per cent.	Net Profit.		Rate per cent.	Stocks.
			£	s. d.		£	s. d.		
3½ Years ended Oct. 31, 1885	8,929 18 6	8,829 18 6	5,785 11	9	65·52	138 14 1	1·67		£ 445
3½ " " Dec. 29, 1888	22,664 0 11	22,637 17 11	14,004 16	1	61·86	447 5 1	1·97		1,083
3 " " " 26, 1891	36,236 17 9	36,294 7 3	20,700 14	4	57·03	3,568 6 9	9·83		1,222
3 " " " 29, 1894	47,454 9 1	47,426 18 10	26,665 10	1	56·22	5,765 10 9	12·15		1,177
3 " " " 25, 1897	65,408 11 4	68,950 8 5	33,208 6 9		48·16	10,253 6 4	14·87		1,332
3 " " " 29, 1900	66,275 19 9	66,217 7 11	35,527 9 2		53·65	9,959 1 9	15·04		2,105
3 " " " 26, 1903	67,510 19 5	67,658 8 8	39,687 16 7		58·66	4,967 14 1	7·34		2,354
3 " " " 29, 1906	67,238 4 3	67,526 18 7	42,120 1 0		62·97	3,096 4 8	4·58		2,049
3 " " " 25, 1909	74,346 13 2	74,839 5 5	45,676 19 6		61·03	2,234 17 5	3·05		3,149
3 " " " 28, 1912	83,588 2 10	84,232 6 11	49,472 13 1		58·73	3,739 19 10	4·44		4,983
1 " " " 27, 1913	36,376 16 7	36,368 16 0	19,591 7 8½		53·86	3,337 19 5½	9·18		6,922
6 Months " June 27, 1914	18,256 2 3	17,641 15 6	10,130 13 11		57·42	1,539 0 0	8·72		5,673
Totals.....	594,181 15 10	598,624 10 2	342,571 19 11½		57·22	49,098 0 2½	8·20		....

WOOLLEN SHIRT FACTORY.

Period.	Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Stocks.
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£
3½ Years ended Oct. 31, 1885	3,238	11 4	3,238	11 4	2,443	16 0	75·44		134	2 11	4·13		70
3½ " " Dec. 29, 1888	5,893	8 9	5,923	17 11	3,743	10 6	63·19		99	3 3	1·67		112
3 " " " 26, 1891	9,047	2 11	9,011	15 11	5,556	7 7	61·65		799	10 6	8·86		130
3 " " " 29, 1894	11,975	1 1	12,023	2 6	7,553	19 2	62·82		1,207	15 6	10·03		764
3 " " " 25, 1897	27,485	16 3	27,482	2 0	14,302	0 11	52·04		2,060	14 4	7·49		2,239
3 " " " 29, 1900	38,975	4 5	39,291	15 0	21,992	8 9	55·97		1,427	2 0	3·63		2,230
3 " " " 26, 1903	24,797	14 11	24,745	7 3	15,258	15 1	61·66		2,005	13 7	8·10		226
3 " " " 29, 1906 . . .	25,608	10 4	25,599	16 5	15,584	16 4	60·88		4,169	3 10	16·28		60
3 " " " 25, 1909	28,861	6 0	28,866	2 3	18,058	8 8	62·55		2,127	6 1	7·36		82
3 " " " 28, 1912	31,934	11 4	31,954	10 4	18,964	9 0	59·85		3,762	6 6	11·77		112
1 " " " 27, 1913	11,809	13 0	11,809	14 5	6,489	2 7	54·95		1155	14 2	9·78		540
6 Months " June 27, 1914	6,460	19 1	6,449	18 10	3,558	3 1	55·16		600	15 4	9·32		498
Totals.....	226,087	19 5	226,396	14 2	133,505	17 8	58·97		19,549	8 0	8·63		....

NOTE.—Until June 28th, 1901, the above figures include Underclothing Factory.

ARTISAN CLOTHING FACTORY.

Period.	Transfers.	Production.	Expenses on Production.	Rate per cent.	Net Profit.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
3 Years ended Dec. 30, 1893	8,212 17 10	8,308 4 7	5,708 0 7	63.70	266 10 5	3.20	476
3 " " 26, 1896	10,851 2 6	10,837 15 0	7,301 19 0	67.37	759 12 4	7.00	203
3 " " 30, 1899	13,847 16 3	13,792 2 11	9,619 1 3	69.74	1,376 8 10	9.84	150
3 " " 27, 1902	18,565 19 9	18,557 13 11	13,440 6 8	72.42	1,530 9 7	8.24	320
3 " " 30, 1905	19,891 11 8	20,103 13 8	15,670 2 6	77.95	286 4 5	1.42	484
3 " " 26, 1908	27,109 10 6	27,240 16 2	20,185 2 8	74.10	1,066 17 7	3.91	927
3 " " 30, 1911	27,886 8 10	27,687 15 1	20,664 7 10	74.63	795 11 0	2.65	998
1 Year " 28, 1912	10,539 5 5	10,568 17 9	7,611 2 0	72.01	347 12 5	3.28	757
1 " " 27, 1913	10,883 10 9	10,782 17 8	7,921 1 3	73.45	591 15 10	5.49	696
6 Months " June 27, 1914	5,682 12 0	5,681 3 0	4,229 12 6	74.44	300 0 10	5.28	674
Totals.....	153,470 15 6	153,560 19 9	112,950 16 3	73.16	7,261 8 3	4.73	....

MANTLE FACTORY.

Period.	Transfers. £ s. d.	Production. £ s. d.	Expenses on Production. £ s. d.	Rate per cent.	Net Profit. £ s. d.	Rate per cent.	Stocks. £
3 Years ended Dec. 30, 1893	7,390 3 10	7,420 4 9	4,898 2 7	65.94	*305 12 10	4.11	382
3 " " 26, 1896	8,672 8 2	8,664 7 5	4,886 19 4	56.89	394 6 8	4.55	168
3 " " 30, 1899	12,098 18 8	12,096 18 8	7,568 7 1	62.52	740 13 8	6.12	175
3 " " 27, 1902	16,198 15 1	16,198 15 1	10,385 3 5	64.11	1,280 4 7	7.59	273
3 " " 30, 1905	13,397 5 0	13,397 5 0	8,959 9 11	66.87	1,243 15 0	9.28	343
3 " " 26, 1908	12,818 8 5	12,818 8 5	8,998 11 8	70.20	863 1 10	6.78	149
3 " " 30, 1911	13,945 5 1	13,969 15 1	9,468 17 0	67.78	937 10 6	6.71	202
1 Year " 28, 1912	5,331 8 5	5,324 3 1	3,733 9 0	70.12	287 12 0	5.39	166
1 " " 27, 1913	5,036 16 8	5,038 13 3	3,623 1 2	71.91	200 8 6	3.97	119
6 Months " June 27, 1914	2,285 7 0	2,290 1 7	1,695 16 2	74.06	5 9 2	0.24	163
Totals.....	97,174 16 4	97,218 12 4	64,207 17 4	66.04	5,597 9 1	5.76	....

* Loss.

HOSIERY FACTORY.

Period.	Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Stocks.
	£	s. d.	£	s. d.	£	s. d.			£	s. d.			£
3 Years ended Dec. 28, 1895.....	17,604	8 2	17,392	18 7	6,011	1 5	34·56		581	18 7	3·34		745
3 " " 31, 1898.....	27,674	2 0	28,859	13 5	9,508	17 7	32·95		1,695	0 10	5·87		2,190
3 " " 28, 1901.....	43,122	18 5	44,605	11 5	14,969	17 11	33·56		1,607	8 2	3·60		4,430
3 " " 31, 1904.....	63,662	10 3	62,202	6 8	20,939	3 6	33·66		1,261	0 2	2·02		2,492
3 " " 28, 1907.....	76,741	10 8	77,095	11 1	23,420	15 11	30·38		2,086	17 8	2·70		5,075
3 " " 31, 1910.....	94,378	11 10	97,471	9 3	29,192	2 3	29·95		1,874	14 6	1·92		8,257
1 Year " 30, 1911.....	97,118	15 8	35,606	1 4	10,363	3 5	29·10		454	6 2	1·27		7,866
1 " " 28, 1912.....	36,142	7 7	38,023	2 9	11,270	2 8	29·64		802	3 11	2·11		9,295
1 " " 27, 1913.....	33,238	4 7	34,281	18 10	10,195	3 6	29·73		341	12 4	0·99		11,778
6 Months " June 27, 1914.....	10,776	16 3	14,674	4 5	4,695	8 7	31·99		*292	3 4	1·58		14,920
Totals.....	439,460	5 5	450,212	17 9	140,565	16 9	31·22		10,472	19 0	2·33		....

* Loss.

UNDERCLOTHING FACTORY.

Period.		Transfers.			Production.			Expenses on Production.			Rate per cent.			Net Profit.			Rate per cent.			Shooks.		
		£	s.	d.	£	s.	d.	£	s.	d.				£	s.	d.				£		
6 Months ended Dec. 28, 1901		3,857	0	2	3,853	3	9	1,900	3	7	49.18			318	13	11	8.23			1,083		
1 Year " 27, 1902		8,128	19	8	8,129	16	9	4,039	13	0	49.68			839	11	7	10.32			544		
1 " " 26, 1903		7,394	13	7	7,380	12	6	4,449	11	9	60.28			561	11	9	7.6			199		
1 " " 31, 1904		7,358	17	10	7,358	17	10	4,026	9	4	54.71			447	19	11	6.09			141		
1 " " 30, 1905		6,658	13	7	6,658	13	7	3,666	7	5	55.06			718	8	6	10.78			425		
1 " " 29, 1906		7,750	9	6	7,750	9	6	3,968	6	7	51.20			1,064	8	5	13.72			275		
1 " " 28, 1907		7,624	10	5	7,628	9	4	4,192	3	4	54.95			690	19	6	9.06			524		
1 " " 26, 1908		7,844	16	11	7,840	18	0	4,340	15	1	55.36			548	17	1	7.00			511		
1 " " 25, 1909		7,526	5	3	7,526	5	3	4,290	17	10	57.01			528	18	3	7.02			495		
1 " " 31, 1910		8,119	0	6	8,123	8	6	4,427	10	0	54.50			1,105	15	7	13.61			570		
1 " " 30, 1911		8,842	7	7	8,838	11	4	4,731	16	3	53.54			1,314	4	2	14.87			595		
1 " " 28, 1912		9,303	9	2	9,307	17	5	4,938	4	8	53.05			1,418	2	10	15.23			627		
1 " " 27, 1913		10,004	9	4	10,010	4	10	5,067	13	9	50.62			972	8	1	9.71			531		
6 Months " June 27, 1914		5,621	3	8	5,621	13	3	2,756	16	8½	48.69			727	14	8½	12.95			639		
Totals.....		106,039	16	9	106,038	1	10	55,776	9	3½	53.54			11,257	8	10½	10.62			....		

BOOT FACTORY.

Period.		Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Stocks.	
		£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.
3 Years ended Dec. 31, 1897		81,477	19	2	81,455	15	8	25,576	6	1	2,445	18	3	5,406	
3 " " 27, 1890		145,211	19	6	152,579	1	9	54,330	17	1	7,923	1	8	17,349	
3 " " 30, 1893		252,585	16	10	257,578	3	1	94,375	9	1	15,923	5	5	20,696	
3 " " 26, 1896		333,550	17	0	350,181	8	0	123,581	1	3	23,285	8	10	34,019	
3 " " 30, 1899		509,304	12	7	511,422	8	5	188,686	2	1	23,414	13	0	47,886	
3 " " 27, 1902		712,738	5	11	717,315	5	9	233,671	17	10	26,874	12	4	48,886	
3 " " 30, 1905		715,510	11	8	707,309	10	2	225,043	3	3	17,160	0	4	43,063	
3 " " 26, 1908		797,185	0	0	803,192	18	5	222,454	8	1	19,140	19	3	49,532	
3 " " 30, 1911		815,367	8	5	811,904	15	3	222,407	0	3	21,344	2	3	42,314	
1 Year " 28, 1912		280,384	14	8	295,016	14	3	76,193	2	2	4,581	6	9	71,100	
1 " " 27, 1913		338,793	19	9	330,266	16	11	82,426	6	0	9,668	14	4	49,616	
6 Months " June 27, 1914		155,041	4	5	156,233	17	6	41,227	11	10	2,943	4	3	44,327	
Totals.....		5,137,102	9	11	5,174,456	15	2	1,596,073	5	0	174,705	6	8	....	
														3.38	

CABINET WORKS.

Period.	Transfers.		Production.		Expenses on Production.		Rate per cent.	Net Profit.		Rate per cent.	Stocks.
	£	s. d.	£	s. d.	£	s. d.		£	s. d.		
3 Years ended Dec. 31, 1887		6,009 0 4		6,077 10 9		3,309 9 10	54.45		187 13 6	3.07	1,069
3 " " 27, 1890		25,083 2 2		25,524 2 9		13,448 13 10	52.69		1,062 11 6	4.16	4,975
3 " " 30, 1893		48,081 15 11		50,187 13 3		27,243 16 2	54.28		2,226 19 9	4.44	8,696
3 " " 26, 1896		65,168 8 0		62,799 1 9		35,343 8 8	56.28		3,467 14 0	5.52	10,384
3 " " 30, 1899		98,438 6 10		97,781 3 2		52,900 13 5	54.10		3,873 3 2	3.96	15,660
3 " " 27, 1902		142,598 1 1		144,451 3 0		75,190 17 8	52.05		7,597 10 4	5.26	22,104
3 " " 30, 1905		138,794 15 5		141,134 9 7		70,061 16 10	49.64		4,907 15 11	3.48	18,574
3 " " 26, 1908		139,589 13 10		141,080 0 7		70,325 13 0	49.85		3,211 12 1	2.28	18,587
3 " " 30, 1911		112,253 9 8		109,073 19 9		60,383 1 11	55.86		*411 19 2	*0.88	13,215
1 Year " 28, 1912		41,532 7 0		41,386 4 9		21,562 14 4	52.10		498 10 10	1.20	13,140
1 " " 27, 1913		48,200 12 5		47,584 10 0		23,099 9 10	48.54		1,708 8 4	3.59	13,210
6 Months " June 27, 1914		27,686 14 5		27,243 4 2		13,096 15 4	48.07		795 18 6	2.92	13,645
Totals.....		888,431 7 1		894,323 3 6		465,966 10 10	52.10		29,125 18 9	3.26	....

* Loss.

BRUSH FACTORY.

Period.	Transfers.	Production.	Expenses on Production.	Rate per cent.	Net Profit.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
3 Years ended Dec. 31, 1892.....	11,416 15 9	12,330 12 8	5,061 16 3	41·04	719 16 11	5·83	2,991
3 " " 28, 1895.....	14,458 6 1	13,913 14 11	5,599 4 8	40·24	1,215 18 9	8·73	3,847
3 " " 31, 1898.....	18,662 12 8	18,784 0 1	7,283 19 6	38·77	975 18 5	5·19	5,227
3 " " 28, 1901.....	22,731 15 5	21,576 19 1	8,870 7 8	41·15	2,878 16 7	13·34	5,416
3 " " 31, 1904.....	23,506 14 11	22,877 2 4	9,371 15 6	40·96	1,741 0 9	7·61	4,921
3 " " 28, 1907.....	23,770 16 3	22,764 18 3	9,260 6 10	40·63	849 9 11	3·73	4,542
3 " " 31, 1910.....	20,392 9 2	19,866 11 4	8,904 3 11	44·82	*29 0 3	0·14	3,525
1 Year " 30, 1911.....	7,146 2 11	7,123 2 4	3,186 5 5	44·73	*71 4 7	0·99	3,371
1 " " 28, 1912.....	7,324 2 7	7,643 6 2	3,492 6 3	45·69	216 5 5	2·83	4,420
1 " " 27, 1913.....	8,064 0 2	7,719 16 0	3,461 18 5	44·84	400 19 0	5·19	4,786
6 Months " June 27, 1914.....	4,353 12 6	4,246 7 3	1,826 14 7	43·03	213 12 3	5·02	4,649
Totals.....	161,827 8 5	158,846 10 5	66,327 19 5	41·76	9,111 13 2	5·73	....

* Loss.

PRINTING WORKS.

Period.		Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Stocks.	
		£ s. d.		£ s. d.		£ s. d.				£ s. d.				£	
3 1/4 Years ended Dec. 27, 1890		14,861	19 3	14,939	12 6	7,252	2 5	48.54		1,062	1 5	7.24		832	
3 " " 30, 1893		36,635	7 9	36,705	6 2	15,256	2 6	41.56		3,153	2 9	8.59		1,584	
3 " " 26, 1896		55,638	13 1	55,824	19 6	21,045	4 4	37.70		7,588	4 9	13.58		2,715	
3 " " 30, 1899		81,828	13 6	81,878	9 7	30,697	12 9	37.49		12,604	12 3	15.39		2,757	
3 " " 27, 1902		100,587	16 9	101,109	19 9	39,484	13 2	39.05		10,474	15 7	10.36		5,657	
3 " " 30, 1905		137,480	4 2	137,237	17 0	56,385	16 9	41.08		11,677	3 11	8.51		4,498	
3 " " 26, 1908		164,904	13 11	165,740	14 10	65,576	0 9	39.56		14,205	5 0	8.57		6,697	
3 " " 30, 1911		183,807	6 10	183,635	11 9	76,518	5 8	41.69		7,557	14 6	4.12		6,467	
1 Year " 28, 1912		63,988	5 9	64,286	14 10	28,204	9 9	43.87		2,240	6 10	3.48		8,674	
1 " " 27, 1913		70,587	6 8	71,386	18 5	29,721	15 2	41.63		1,692	14 2	2.37		10,655	
6 Months " June 27, 1914		39,221	19 8	39,982	15 4	16,799	13 10	42.02		2,162	13 9	5.41		10,230	
Totals.....		949,542	7 4	952,628	19 8	386,941	17 1	40.62		74,483	14 11	7.81		....	

TOBACCO FACTORY.

Period.	Transfers.			Production.			Expenses on Production.			Rate per cent.			Net Profit.			Rate per cent.			Stocks.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
2½ Years ended Dec. 30, 1893	142,245	15	2	148,071	19	1	11,687	3	7	7.89			5,733	7	8	3.87			15,550		
3 " " 26, 1896	286,241	16	2	288,746	15	8	18,561	11	0	6.43			11,869	18	6	4.11			25,478		
3 " " 30, 1899	378,889	0	10	379,446	16	3	25,199	9	3	6.64			25,507	6	0	6.72			33,761		
3 " " 27, 1902	447,178	17	5	449,775	17	9	29,012	9	8	6.45			20,770	11	0	4.62			51,090		
3 " " 30, 1905	498,524	6	8	499,178	4	8	32,709	10	9	6.55			16,460	16	6	3.30			44,266		
3 " " 26, 1908	543,349	11	3	542,020	2	9	30,232	2	2	5.58			32,044	6	3	5.91			38,674		
3 " " 30, 1911	628,266	8	3	631,515	12	4	32,878	19	7	5.20			21,691	0	1	3.43			43,302		
1 Year " 28, 1912	224,036	11	10	223,584	0	0	12,166	5	1	5.44			2,491	3	4	1.11			45,772		
1 " " 27, 1913	231,184	2	5	233,628	2	3	12,107	15	0	5.18			1,229	6	11	0.52			63,648		
6 Months " June 27, 1914	120,132	2	3	118,374	12	1	6,463	3	8	5.46			547	8	10	0.46			47,301		
Totals	3,499,448	12	3	3,514,342	2	10	211,018	9	9	6.00			198,345	5	1	3.94			....		

PRESERVE WORKS.

Period.	Transfers.	Production.	Expenses on Production.	Rate per cent.	Net Profit.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
3½ Years ended Dec. 30, 1893	135,154 4 5	148,276 19 1	15,672 1 6	10.57	7,447 0 2	5.02	20,553
3 " " 26, 1896	173,129 18 6	185,343 14 3	24,393 9 11	13.16	12,187 12 8	6.57	22,204
3 " " 30, 1899 ..	213,880 19 5	212,996 19 7	28,315 19 1	13.29	21,800 16 6	10.23	20,818
3 " " 27, 1902	204,409 5 4	210,000 1 2	32,806 5 1	15.62	15,186 3 7	7.23	26,057
3 " " 30, 1905	263,052 12 9	261,632 7 4	41,669 12 5	15.92	15,345 17 5	5.86	27,556
3 " " 26, 1908	257,275 19 6	248,951 13 10	46,317 5 7	18.60	14,998 1 5	5.78	27,576
3 " " 30, 1911	263,199 13 10	277,175 6 6	47,513 14 2	17.14	15,799 11 2	5.70	27,150
1 Year " 28, 1912	96,797 10 2	97,100 12 5	17,233 16 10	17.75	5,067 3 5	5.22	23,532
1 " " 27, 1913	88,919 2 11	89,772 18 9	17,177 2 9	19.13	2,946 0 1	3.28	27,508
6 Months " June 27, 1914	50,976 11 5	33,733 1 7	9,008 17 8	26.71	1,126 5 0	3.34	10,102
Totals.....	1,746,795 18 3	1,764,983 14 6	280,108 5 0	15.87	111,304 11 5	6.31	....

CONFECTIONERY WORKS.

Period.	Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Stocks.
	£	s. d.	£	s. d.	£	s. d.			£	s. d.			£
3½ Years ended Dec. 29, 1894	33,584	3 4	35,119	6 10	7,663	15 3	21.82		*73	1 7	0.21		1,495
3 " " 25, 1897	41,868	17 1	41,620	4 3	9,316	19 7	22.88		2,414	7 10	5.8		1,192
3 " " 29, 1900	47,512	12 8	47,840	4 9	10,838	18 5	22.66		2,382	7 11	4.98		1,607
3 " " 26, 1903	53,586	11 0	53,731	18 11	11,750	14 2	21.87		2,018	11 11	3.75		1,695
3 " " 29, 1906	51,667	10 7	51,241	4 1	13,475	6 4	26.80		2,688	19 5	5.25		1,506
3 " " 25, 1909	52,515	14 8	52,403	16 11	13,920	2 9	26.56		1,894	1 2	3.61		1,521
1 Year " 31, 1910	20,172	0 0	20,322	1 4	5,234	12 11	25.75		702	13 9	3.45		2,018
1 " " 30, 1911	20,224	19 5	20,163	12 4	5,438	9 11	26.97		1,006	11 10	4.99		2,386
1 " " 28, 1912	20,867	13 4	20,817	12 2	5,899	4 4	28.34		450	9 4	2.16		1,729
1 " " 27, 1913	21,196	11 9	21,091	13 0	6,099	7 3	28.91		456	15 8	2.17		1,922
6 Months " June 27, 1914	10,982	16 0	11,284	4 4	3,340	8 6	29.60		139	7 1	1.23		2,678
Totals	374,179	9 10	375,635	18 11	92,977	19 5	24.75		14,081	4 4	3.75		....

* Loss.

CHANCELOT FLOUR MILL, EDINBURGH.

Period.	Sales and Transfers.	Production.	Expenses on Production.	Rate per cent.	Net Profit.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£
2½ Years ended Dec. 26, 1896	553,357 2 7	569,923 3 0	51,755 3 6	9.03	3,545 0 0	0.62	50,438
3 " " 30, 1899	1,151,985 18 11	1,155,013 4 8	79,522 16 2	6.88	15,886 1 3	1.36	62,017
3 " " 27, 1902	1,129,636 14 6	1,162,444 16 2	82,907 15 2	7.13	15,968 18 1	1.37	27,514
3 " " 30, 1905	1,194,818 5 2	1,205,106 19 0	81,155 10 6	6.73	64,981 7 3	5.39	64,653
3 " " 26, 1908	1,118,008 1 1	1,115,512 15 7	78,747 19 0	7.06	24,623 10 3	2.21	36,680
3 " " 30, 1911	1,325,023 3 11	1,322,593 3 1	89,264 15 9	6.75	26,899 19 11	2.03	39,340
1 Year " 28, 1912	454,296 3 1	449,952 13 9	29,615 17 7	6.58	3,296 19 9	0.73	54,940
1 " " 27, 1913	444,345 14 9	439,740 6 10	30,100 4 3½	6.84	3,569 8 0½	0.81	68,059
6 Months " June 27, 1914	207,762 10 1	213,504 4 8	14,427 7 9½	6.76	4,990 0 8½	2.34	31,460
Totals	7,579,233 14 1	7,633,791 11 9	537,497 9 9	7.04	163,511 5 3	2.14	....

JUNCTION FLOUR AND OATMEAL MILL, LEITH.

Year ended	Sales and Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Net Loss.		Rate per cent.		Stocks.	
	£	s. d.	£	s. d.	£	s. d.			£	s. d.			£	s. d.			£	
* Dec. 25, 1897..	76,693	7 1	84,479	19 3	6,145	6 10	7.23	0.09	42	6 11			1,979	0 9	..		11,746	..
+ " 31, 1898..	153,869	9 2	152,903	19 5	11,597	14 1	7.64	..	....						1.29		17,683	..
" 30, 1899..	137,245	3 6	138,657	5 2	10,829	15 6	7.81	0.07	98	12 4			....		..		13,886	..
" 29, 1900..	139,289	15 11	140,317	11 1	11,548	8 3	8.23	1.08	1,514	8 2			....		..		17,298	..
" 28, 1901..	112,183	2 3	112,865	3 7	10,738	12 9	9.54	1.51	1,729	1 10			....		..		17,282	..
" 27, 1902..	163,489	5 4	162,558	5 7	12,246	0 2	7.53	2.21	3,602	7 5			....		..		10,666	..
" 26, 1903..	168,844	17 8	167,501	6 2	12,795	14 2	7.64	4.03	6,749	17 5			....		..		17,133	..
+ " 31, 1904..	161,469	15 9	178,966	3 8	12,780	1 5	7.12	4.77	8,390	14 6			....		..		16,027	..
" 30, 1905..	160,516	17 5	165,769	7 6	12,197	5 7	7.36	3.35	5,541	13 6			....		..		13,524	..
" 29, 1906..	155,383	18 6	153,321	8 10	11,246	7 5	7.34	1.51	2,341	9 7			....		..		14,379	..
" 28, 1907..	155,291	15 10	158,994	3 9	12,061	8 11	7.58	0.42	680	18 2			....		..		16,024	..
" 26, 1908..	150,100	2 10	173,451	19 10	16,069	1 4	9.26	..	....				317	1 4	0.18		15,680	..
" 25, 1909..	184,980	0 5	190,019	3 4	17,133	14 2	9.01	..	....				354	4 10	0.18		20,138	..
" 31, 1910..	182,268	12 6	180,384	3 1	17,712	3 10	9.82	..	....				3,526	5 1	1.95		21,803	..
" 30, 1911..	165,907	7 5	164,450	10 5	16,246	14 3	9.88	..	....				2,780	13 10	1.69		27,319	..
" 28, 1912..	187,596	12 3	186,236	12 8	15,645	2 0	8.40	0.53	984	19 6			..		..		13,957	..
" 27, 1913.	176,658	2 1	175,738	17 9	15,073	7 2	8.57	..	....				7	17 11	0.05		23,058	..
+ June 27, 1914..	82,056	1 4	83,920	19 0	8,596	14 7	10.24	1.55	1,298	4 3			....		..		16,399	..
Totals	2,713,844	7 3	2,770,538	0 1	230,613	12 5	8.32	..	32,974	13 7			8,965	3 9	..		..	..
								..	8,965	3 9					..			
								0.87	24,009	9 10								

* Twenty-nine weeks. † Fifty-three weeks. ‡ Half Year.

REGENT FLOUR MILLS, GLASGOW.

Year ended	Sales and Transfers.		Production.		Expenses on Production.		Rate per cent.		Net Profit.		Rate per cent.		Stocks.
	£	s. d.	£	s. d.	£	s. d.			£	s. d.			
*December 31, 1904	269,913	11 7	275,233	5 3	26,393	9 6	9.59		5,696	11 7	2.07		£ 51,999
" 30, 1905	295,023	0 11	295,016	19 4	22,166	18 4	7.51		5,700	3 1	1.93		35,595
" 29, 1906	267,852	10 4	269,793	10 0	23,951	7 0	8.88		†2,160	13 11	0.80		39,939
" 28, 1907	360,638	8 11	365,555	14 2	24,903	2 2	6.81		†318	5 8	0.08		36,454
" 26, 1908	427,623	5 6	426,580	6 5	26,603	10 2	6.23		3,379	14 7	0.79		71,690
" 25, 1909	466,460	11 5	473,853	8 4	26,210	7 9	5.53		9,187	8 10	1.94		67,190
" 31, 1910	447,243	6 10	486,913	3 3	28,430	9 1	6.51		5,813	8 0	1.33		99,318
" 30, 1911	393,143	16 7	393,280	11 2	26,139	16 1	6.65		2,373	3 1	0.60		36,583
" 28, 1912	457,630	1 2	457,648	5 2	30,660	17 2	6.70		862	10 1	0.19		96,776
" 27, 1913	449,580	14 6	443,735	9 6	31,869	9 1½	7.18		†4,098	18 8½	0.92		194,243
†June 27, 1914	219,160	13 9	235,784	12 10	17,296	15 2	7.66		†685	13 4	0.30		108,298
Totals.....	4,053,770	1 6	4,062,845	5 5	284,626	1 6½	7.00		25,749	7 7½	0.63		..

* Fifty-eight weeks.

† Half Year.

‡ Loss.

SOAP WORKS, GRANGEMOUTH.

Year ended	Sales and Transfers.	Production.	Expenses on Production.	Rate per cent.	Net Profit.	Rate per cent.	Net Loss.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.	£ s. d.		£ s. d.		£ s. d.		£
*Dec. 25, 1897	1,093 19 3	2,307 10 11	658 10 1	28.52	....	..	606 12 9	26.26	7,089
" 31, 1898	29,361 1 9	31,981 15 11	7,159 15 4	22.67	....	..	1,323 7 1	4.80	11,517
" 30, 1899	39,247 11 2	38,753 16 7	8,524 10 5	22.14	....	2.54	....	..	18,590
" 29, 1900	46,530 0 11	48,126 19 11	9,755 5 0	20.27	....	..	686 6 11	1.42	26,560
" 28, 1901	54,033 0 3	54,387 14 5	9,132 7 0	16.79	1,650 10 8	2.82	....	..	21,792
" 27, 1902	56,821 18 2	57,047 16 11	9,304 10 3	16.38	2,101 17 9	3.71	....	..	22,202
" 26, 1903	51,810 16 2	46,534 3 8	8,875 19 5	19.58	....	..	4,211 8 0	10.69	14,682
† " 31, 1904	47,665 4 0	48,500 4 10	9,906 18 8	20.46	....	..	928 11 10	1.91	16,289
" 30, 1905	44,917 16 9	45,963 18 10	9,618 0 9	21.56	....	..	2,945 1 4	6.40	18,880
" 29, 1906	63,453 4 7	64,667 8 2	10,560 17 6	17.06	2,751 17 8	4.73	....	..	17,240
" 28, 1907	97,991 0 11	97,405 17 1	11,479 18 8	11.78	5,352 15 11	5.49	....	..	16,079
" 26, 1908	88,135 3 6	82,199 13 5	11,026 16 5	12.95	8,825 3 6	10.36	....	..	12,647
" 25, 1909	88,295 4 0	80,990 15 10	11,684 3 8	14.42	6,542 11 8	8.07	....	..	10,497
" 31, 1910	92,260 16 3	93,333 9 8	11,632 12 11	12.46	8,373 18 11	8.97	....	..	15,791
" 30, 1911	98,349 10 0	97,342 5 6	12,492 6 1	12.83	6,115 11 11	6.28	....	..	11,464
" 28, 1912	99,285 12 7	97,479 7 6	13,083 14 3½	13.42	6,794 17 6½	6.97	....	..	10,261
" 27, 1913	120,164 1 0	122,776 5 2	14,935 6 5½	12.16	6,198 17 5½	5.04	....	..	13,164
† June 27, 1914	62,394 9 8	60,975 8 4	8,235 7 5	13.50	2,808 3 11	4.60	....	..	15,784
Totals ..	1,171,210 10 11	1,170,774 12 8	178,067 0 4	15.21	58,313 0 2	..	10,701 7 11	..	..
					10,701 7 11	..			
					47,611 12 3	4.07			

* Short Period.

† Half Year.

‡ Fifty-three weeks.

FISH CURING WORKS, ABERDEEN.

Year ended	Transfers.		Expenses.		Rate per cent.	Net Profit.	Rate per cent.	Stocks.
	£	s. d.	£	s. d.		£	s. d.	£
December 30, 1899	3,814	16 0	30	1 3	0.79	†24	9 2	6
" 29, 1900	22,987	14 5	1,502	16 7	6.70	273	11 10	32
" 28, 1901	33,582	0 6	1,926	4 9	5.73	1,108	6 9	36
" 27, 1902	44,168	1 7	2,771	14 7	6.27	1,201	17 4	66
" 26, 1903	48,312	13 10	2,984	4 3	6.17	1,315	0 10	18
† " 31, 1904	63,374	19 11	4,029	5 3	6.30	1,431	15 7	116
" 30, 1905	60,059	10 6	4,347	7 3	7.23	640	3 8	341
" 29, 1906	65,237	1 6	4,611	2 9	7.07	868	16 5	226
" 28, 1907	71,998	1 0	4,982	1 4	6.98	1,671	7 3	182
" 26, 1908	66,544	8 3	5,269	5 7	7.92	1,477	10 7	335
" 25, 1909	56,358	10 7	5,456	15 0	9.68	1,696	7 11	272
" 31, 1910	62,652	1 7	5,898	15 5	9.32	1,261	4 2	538
" 30, 1911	64,649	7 11	6,420	2 7	9.93	2,133	4 0	615
" 28, 1912	73,213	7 2	6,500	9 8	8.88	1,585	3 4	486
" 27, 1913	91,677	11 10	6,583	18 1	7.18	1,606	14 9	989
* June 27, 1914	51,840	7 10	3,098	9 6	5.97	1,373	14 8	1,324
Totals	879,270	14 5	66,352	13 10	7.54	19,620	9 11	..

* Half Year.

† Fifty-three weeks.

‡ Loss.

BLADNOCH AND WHITHORN CREAMERIES.

Year ended	Transfers.	Expenses.	Rate per cent.	Net Profit.	Rate per cent.	Stocks.
	£ s. d.	£ s. d.		£ s. d.		£
December 30, 1899	35,614 12 10	2,214 0 6	6·21	3,079 10 11	8·64	4,248
" 29, 1900	55,442 14 9	4,298 5 7	7·75	6,743 13 5	12·16	5,172
" 28, 1901	65,074 12 1	5,124 1 5	7·87	7,346 7 4	11·28	6,799
" 27, 1902	83,128 4 9	5,956 7 0	7·15	4,014 7 6	4·82	7,817
" 26, 1903	75,980 15 2	6,517 17 10	8·58	4,612 7 7	6·07	6,450
" 31, 1904	76,047 6 4	7,162 16 5	9·41	4,672 12 2	6·14	5,595
" 30, 1905	67,472 1 10	7,062 11 10	10·46	4,482 11 6	6·64	3,192
" 29, 1906	75,358 17 1	7,051 15 0	9·35	4,511 1 5	5·98	4,111
" 28, 1907	75,032 14 11	7,703 7 2	10·02	1,339 1 7	1·78	7,533
" 26, 1908	80,346 14 2	8,367 5 8	10·41	2,689 1 4	3·35	6,321
" 25, 1909	87,336 15 10	8,565 9 1	9·81	1,789 1 0	2·04	6,534
" 31, 1910	98,616 19 8	9,295 18 7	9·42	2,835 19 3	2·87	6,565
" 30, 1911	87,890 13 11	9,398 17 5	10·69	2,383 1 9	2·71	5,765
" 28, 1912	99,596 15 7	9,691 13 3	9·73	544 5 6	0·55	4,877
" 27, 1913	108,744 4 2	10,798 3 7½	9·93	778 0 7½	0·71	9,163
† June 27, 1914	53,809 10 3	6,079 15 6	11·30	993 10 0	1·84	14,383
Totals	1,225,443 13 4	115,288 5 10½	9·48	52,814 12 10½	4·31	..

* Fifty-three weeks. † Half Year.

EMPLOYÉS.

NUMBER OF EMPLOYÉS, JUNE 27TH, 1914.

DISTRIBUTIVE DEPARTMENTS.

		Collective Totals.
General Office	Glasgow	293
Grocery	"	186
Stationery	"	23
Potato (not including Field Staff)	"	7
Cattle Buying	"	7
Coal	"	6
Drapery (Mantle and Millinery Workrooms included)	"	521
Boot	"	131
Furniture	"	183
Carting and Fodder	"	258
Waste	"	17
Cleaners	"	20
Miscellaneous	"	9
Dining-room	"	24
"	Shieldhall	14
		1,699
Leith—Warehouse		114
" Carting Department		72
Kilmarnock		35
Dundee		7
Enniskillen and Creameries		102
Edinburgh—Chambers Street		38
Greenock—Sugar Forwarding		1
London—Drapery Office		3
Canada (Winnipeg)—Wheat Buying		3
" Elevators		11
		386
Retail Branch	Elgin	4
"	Buckie	6
"	West Bams	14
		24

PRODUCTIVE DEPARTMENTS.

Boot Factory, Currying, &c.	Shieldhall	1,104
" " Parkview	Glasgow	250
Clothing Factory, Ready-made	Shieldhall	442
" " Bespoke and Caps	Glasgow	290
" " Juvenile	"	124
" " Artisan	Shieldhall	207
" " Underclothing	Glasgow	148
" " Woollen Shirts	"	180
" " Dress Shirts	Potterhill	249
" " Laundry	"	84
" " Hosiery	Shieldhall	161
" " "	Leith	95
" " Mantle	Glasgow	64
" " Waterproof	"	56
" " Hat (Silk)	"	9
" " Umbrella	"	10
		3,473

Carried forward 5,582

NUMBER OF EMPLOYÉS, JUNE 27TH, 1914.

PRODUCTIVE DEPARTMENTS— <i>continued</i> .		Collective Totals.
Brought forward	5,582	
Saddlery	Glasgow	12
"	Leith	1
Horse Shoeing	Glasgow	5
"	Leith	2
Cartwright	Glasgow	34
"	Leith	7
Motor Engineering	Glasgow	13
Engineering	Shieldhall	76
Electrical	Glasgow	40
Tinware	Shieldhall	108
Scale Repair	Glasgow	17
Cabinet	Shieldhall	274
Brush	"	46
Printing	"	491
Tobacco	"	193
Preserve	"	234
Confection	"	101
Coffee Essence	"	59
Pickle	"	36
Chemical	"	264
Miscellaneous	"	14
Sausage	Glasgow	23
Ham Curing	"	21
"	Leith	12
Aërated Water	Glasgow	98
"	Leith	10
"	Stirling	12
"	Dunfermline	13
Chancelot Flour Mills	Edinburgh	97
Junction "	Leith	50
Regent "	Glasgow	97
Ettrick Tweed "	Selkirk	170
Ayrshire Blanket "	Galston	46
Soap Works	Grangemouth	123
Fish Curing	Aberdeen	75
Creameries—Bladnoch and Whithorn	Wigtownshire	84
Farm—Carntyne	Lanarkshire	1
Estate—Calderwood	"	48
Milk Centre—Ryelands	"	8
		— 3,015

BUILDING DEPARTMENT.

Tradesmen	349
Management	12
	— 361

Total..... 8,958

BONUS TO LABOUR.

The payment of bonus, since its institution in 1870, has taken three different forms. Till 1884 employés received, on wages earned, double the rate per £ allocated as dividend on members' purchases. This arrangement was then replaced by one which set aside the double claim of the employé, and, recognising a difference between workers in the distributive and productive departments, established a differential rate. The distributive employés received the same rate of bonus as was the rate of dividend on members' purchases, and the rate of bonus to productive workers was determined by the net aggregate profit made in the manufacturing departments only. This arrangement continued till 1892, when the system of bonus payment was again revised. Hitherto the whole bonus allocated had been paid over; but the present system, which allows a uniform rate to both distributive and productive departments, requires that one-half of each worker's bonus be retained and put to his credit, forming a special fund, called the Bonus Fund. This capital bears interest at the rate of 4 per cent. per annum, and is not withdrawable until the expiry of three months after leaving the service of the Society, unless with the consent of the Committee:

EMPLOYÉ-SHAREHOLDERS.

Simultaneously with the introduction of the present scheme of bonus, arrangements were made to permit of employés becoming shareholders in the Society. The number of shares held by one individual may range from five to fifty of twenty shillings each, and the paid-up capital bears interest at the rate of 5 per cent. per annum. By the rules of the Society, the shareholding employés are entitled to send one representative to the quarterly meeting, and one additional for every 150 employés who become shareholders. At the present time there are 593 shareholders, which permits of a representation of four at the business meetings of the Society.

The statements following show the amount of bonus paid each year since 1870, and the total amount thus paid to employés, also the Bonus Fund and the Employé-Shareholders' Fund at June 27th, 1914.

Bonus to Labour.

FIRST BONUS SCHEME.

				Amount.			Average Rate per £.		
				£	s.	d.	s.	d.	
Quarter ending November 19, 1870.....				5	11	0	.....	0	8
Year	"	"	18, 1871.....	40	10	0	.....	0	10½
"	"	"	16, 1872.....	52	7	0	.....	0	9½
"	"	"	15, 1873.....	90	1	8	.....	0	9½
"	"	"	14, 1874.....	116	9	0	.....	0	8½
"	"	"	13, 1875.....	109	15	4	.....	0	8
"	"	"	4, 1876.....	108	13	4	.....	0	8
"	"	"	3, 1877.....	121	10	0	.....	0	8
"	"	"	2, 1878.....	147	17	0	.....	0	8
"	"	"	2, 1879.....	203	3	0	.....	0	9½
"	"	October	30, 1880.....	322	9	3	.....	1	1
"	"	November	5, 1881.....	368	3	8	.....	1	0
"	"	"	4, 1882.....	453	9	1	.....	0	11
"	"	"	3, 1883.....	542	3	0	.....	0	11½
"	"	"	1, 1884.....	484	2	6	.....	0	9½

SECOND BONUS SCHEME.

Year ending		Distributive Amount.			Rate per £.		Productive Amount.			Rate per £.	
		£	s.	d.	£	d.	£	s.	d.	s.	d.
October	31, 1885	483	13	1	.....	0 6½	—	.....	—	.....	—
December	25, 1886	873	0	6	.....	0 6½	—	.....	—	.....	—
"	31, 1887	603	0	2	.....	0 6½	315	2	1	.....	0 4
"	29, 1888 .. .	683	12	1	.....	0 6¼	628	11	7	.....	0 7
"	28, 1889	833	16	10	.....	0 6½	1,016	14	10	.....	0 8½
"	27, 1890	1,139	6	10	.....	0 7	1,752	10	6	.....	0 11
"	26, 1891	1,208	9	3	.....	0 6½	1,802	14	9	.....	0 9
"	31, 1892	1,813	8	3	.....	0 6½	2,320	11	4	.....	0 9

Bonus to Labour.

PRESENT BONUS SCHEME.				Rate per £.	
				£	s. d.
				s.	d.
Year ending December 30, 1893	3,775	15	0	0	6½
" " " 29, 1894	3,563	18	9	0	6
" " " 28, 1895	4,634	14	0	0	7½
" " " 26, 1896	5,965	17	9	0	7¾
" " " 25, 1897	7,431	8	8	0	8
" " " 31, 1898	7,017	2	6	0	7
" " " 30, 1899	8,943	12	0	0	8
" " " 29, 1900	9,938	10	8	0	8
" " " 28, 1901	10,502	8	8	0	8
" " " 27, 1902	11,136	0	0	0	8
" " " 26, 1903	11,832	11	9	0	8
" " " 31, 1904	12,476	12	8	0	8
" " " 30, 1905	12,418	15	7	0	8
" " " 29, 1906	12,849	4	8	0	8
" " " 28, 1907	13,407	14	7	0	8
" " " 26, 1908	14,276	19	10	0	8
" " " 25, 1909	13,892	9	0	0	8
" " " 31, 1910	14,366	9	4	0	8
" " " 30, 1911	15,433	3	3	0	8½
" " " 28, 1912	15,340	13	4	0	8
" " " 27, 1913	16,583	0	0	0	8
Half Year ending June 27, 1914	8,744	10	8	0	8

Total amount paid as bonus to June 27th, 1914.....£253,172 10 1

Amount of Bonus Fund at June 27th, 1914..... 75,942 10 5

Employé-Shareholders' Fund at June 27th, 1914—593 employés holding
18,339 shares, with £16,433 paid up.

LIST OF CO-OPERATIVE CONGRESSES AND PRESIDENTS.

(Compiled by the Co-operative Union.)

No.	Year.	Date of Opening.	Where Held.	President of First Day.	President of Second Day.	President of Third Day.
1	1869	May 31	London: Society of Arts, John Street, Adelphi.	T. Hughes, M.P.....	A. J. Mundella, M.P.	W. Morrison, M.P.
2	1870	June 6	Manchester: Memorial Hall.....	W. Morrison, M.P.....	Rev. W. N. Molesworth, M.A.	J. T. Hibbert, M.P.
3	1871	April 10	Birmingham: Midland Institute....	Hon. Aub. Herbert, M.P.	C. Cattell	W. Morrison, M.P.
4	1872	" 1	Bolton: Co-operative Hall.....	T. Hughes, M.P.....	E. V. Neale	W. Morrison, M.P.
5	1873	" 12	Newcastle-on-Tyne: Mechanics' Institute.	Joseph Cowen, jun. ..	W. Morrison, M.P....	T. Hughes, M.P.
6	1874	" 6	Halifax: Mechanics' Hall	Thomas Brassey, M.P.	W. Morrison	W. Morrison.
7	1875	Mar. 29	London: Co-operative Institute	Professor T. Rogers ..	T. Hughes, Q.C.	W. Morrison.
8	1876	April 17	Glasgow: Assembly Rooms, 138, Bath Street.	*Professor Caird	G. Anderson, M.P. ...	James Crabtree.
9	1877	" 2	Leicester: Museum Hall	Hon. Auberon Herbert.	Lloyd Jones.....	Abraham Greenwood.
10	1878	" 22	Manchester: Co-operative Hall, Downing Street.	Marquis of Ripon	Bishop of Manchester	Dr. John Watts.
11	1879	" 14	Gloucester: Corn Exchange.....	Professor Stuart.....	J. T. W. Mitchell ..	James Crabtree.
12	1880	May 17	Newcastle-on-Tyne: Bath Lane School-room.	Bishop of Durham....	R. S. Watson	H. R. Bailey.

* Inaugural Address delivered by Prof. Hodgson.

LIST OF CO-OPERATIVE CONGRESSES AND PRESIDENTS—continued.

No.	Year.	Date of Opening.	Where Held.	President of First Day.	President of Second Day.	President of Third Day.
13	1891	June 6	Leeds: Albert Hall	Lord Derby	T. Hughes, Q.C.	James Crabtree.
14	1892	May 29	Oxford: Town Hall	Lord Reay	Councillor Pumphrey	George Hines.
15	1893	May 14	Edinburgh: Oddfellows' Hall	Rt. Hon. W. E. Baxter, M.P.	William Maxwell ..	John Allan.
16	1894	June 2	Derby: Lecture Hall	Sedley Taylor, M.A. ..	A. Scotton	Councillor Hartley.
17	1895	May 25	Oldham: Co-operative Hall, King St.	Lloyd Jones	F. Hardern	Lewis Feber.
18	1896	June 14	Plymouth: Guildhall	Earl of Morley	A. H. D. Acland, M.P.	J. H. Young.
19	1897	May 30	Carlisle: Her Majesty's Theatre	G. J. Holyoake	Sir W. Lawson, M.P.	Councillor Rule.
20	1898	" 21	Dewsbury: Co-operative Hall	E. V. Neale	Marquis of Ripon ..	John Cave, jun.
21	1899	June 10	Ipswich: Public Hall	Professor A. Marshall..	B. Jones	George Hines.
22	1890	May 26	Glasgow: City Hall	Earl of Rosebery	William Maxwell ..	James Deans.
23	1891	" 18	Lincoln: Drill Hall	A. H. D. Acland, M.P.	D. McInnes	J. Hepworth.
24	1892	June 6	Rochdale: Baillie Street Chapel	J. T. W. Mitchell, J.P.	A. Greenwood	Councillor Cheetham.
25	1893	May 22	Bristol: Hall of the Y.M.C.A.	Councillor G. Hawkins.	J. Clay, J.P.	W. H. Brown, C.C.
26	1894	" 14	Sunderland: Victoria Hall	T. Tweddell, J.P., F.R.G.S.	J. McKendrick	W. Crooks.
27	1895	June 3	Huddersfield: Town Hall	Geo. Thomson	T. Bland, J.P.	Jas. Broadbent.
28	1896	May 25	Woolwich: Tabernacle, Beresford St.	*B. Jones	B. Jones	B. Jones.

* Inaugural Address delivered by Earl of Winchilsea.

LIST OF CO-OPERATIVE CONGRESSES AND PRESIDENTS—continued.

No.	Year.	Date of Opening.	Where Held.	President of First Day.	President of Second Day.	President of Third Day.
29	1897	June 7	Perth: City Hall.....	Wm. Maxwell, J.P.....	Wm. Maxwell, J.P....	Wm. Maxwell, J.P.
30	1898	May 30	Peterborough: Theatre Royal, Broadway.	*D. Mc.Innes.....	D. Mc.Innes	D. Mc.Innes.
31	1899	" 22	Liverpool: St. George's Hall.....	F. Hardern, J.P.....	F. Hardern, J.P.....	F. Hardern, J.P.
32	1900	June 4	Cardiff: Park Hall.....	W. H. Brown.....	W. H. Brown	W. H. Brown.
33	1901	May 27	Middlesbrough: Town Hall	J. Warwick	J. Warwick	J. Warwick.
34	1902	" 19	Exeter: Theatre Royal	G. Hawkins	G. Hawkins	G. Hawkins.
35	1903	June 1	Doncaster: Corn Exchange	J. Shillito.....	J. Shillito.....	J. Shillito.
36	1904	May 23	Stratford: Town Hall.....	†A. Golightly.....	A. Golightly.....	A. Golightly.
37	1905	June 12	Paisley: G. A. Clark Town Hall	†W. Maxwell.....	W. Maxwell.....	W. Maxwell.
38	1906	" 4	Birmingham: Central Hall	J. C. Gray	J. C. Gray	J. C. Gray.
39	1907	May 20	Preston: Public Hall.....	W. Lander	W. Lander	W. Lander.
40	1908	June 8	Newport: Central Hall	T. W. Allen	T. W. Allen	T. W. Allen.
41	1909	May 31	Newcastle: Palace Theatre	W. R. Rae	W. R. Rae	W. R. Rae.
42	1910	" 16	Plymouth: Guildhall.....	§H. J. A. Wilkins.....	H. J. A. Wilkins....	H. J. A. Wilkins.
43	1911	June 5	Bradford: St. George's Hall.....	Geo. Thorpe	Geo. Thorpe	Geo. Thorpe.
44	1912	May 27	Portsmouth: Town Hall	Wm. Openshaw	Wm. Openshaw	Wm. Openshaw.
45	1913	" 12	Aberdeen: Music Hall	Jas. Deans	Jas. Deans	Jas. Deans.
46	1914	June 1	Dublin: Metropolitan Hall	R. Fleming	R. Fleming	R. Fleming.

* Inaugural Address delivered by Bishop of London.

† Inaugural Address delivered by E. O. Greening.

‡ Inaugural Address delivered by Dr. Müller, Basle.

§ Inaugural Address delivered by W. H. Watkins.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869, TOGETHER WITH NAMES OF WRITERS.

(Compiled by the Co-operative Union.)

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
1	1869	London	Trade Unions and Co-operation	John Frearson.
2	"	"	The North of England Co-operative Wholesale Society	W. Nuttall.
3	"	"	Co-operation : How to Secure Safe Progress Therein	Dr. John Watts.
4	"	"	Associated Homes	Col. Henry Clinton.
5	"	"	Higher Aims of Co-operation and How to Realise Them	Dr. Travis.
6	"	"	Organisation and Co-operation	— Bray.
7	"	"	The Principles of Co-operation as Applied to Credit	R. B. D. Morier.
8	"	"	The Best Means of Making Co-operative Societies Mutually Helpful	Rev. W. N. Molesworth.
9	"	"	Self-supporting Educational Establishments	Ion Perdicaris.
10	"	"	Co-operative Libraries and the Principles on which they should be Formed and Managed.	W. E. A. Axon, F.R.S.L.
11	"	"	Industrial Partnerships	A. Briggs.
12	"	"	Co-operative Organisation and Propaganda	W. Pare, F.S.S.
13	"	"	National Co-operative Organisation	J. Borrowman.
14	"	"	Land, Labour, and Capital	E. T. Craig.
15	"	"	A London Co-operative Board	G. J. Holyoake.
16	"	"	The Claims of Co-operative Societies to the Use of Public Land for Agricultural and Building Purposes.	T. Hare.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—continued.

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
37	1871	Birmingham	London Co-operative Agency	R. Stephens.
38	1872	Bolton	Mutual Guarantees.	El. O. Greening.
39	"	"	The Check System.	J. Borrowman.
40	"	"	A Plea for Checking the Cash taken by Salesmen	J. Watt.
41	"	"	Co-operative Check System.	W. Nuttall.
42	"	"	Productive Co-operation	J. Borrowman.
43	"	"	Production of Flour by the Wholesale Society	— Mc. Pherson.
44	"	"	How to Dispose of the Surplus Capital of Co-operative Societies	F. Smith.
45	"	"	Co-operative Agriculture	R. Stapleton.
46	"	"	How the Rapidly Accumulating Capital of Co-operators may be Best Employed.	El. T. Craig.
47	"	"	Federative Trading	Lloyd Jones.
48	"	"	The Extension of Wholesale Co-operative Societies	J. Borrowman.
49	1873	Newcastle-on-Tyne	The Most Efficient and Practical Plan of Arranging the Powers and Duties of the Central Board.	El. V. Neale.
50	"	"	Principles and Methods of Voting.	J. T. McInnes.
51	"	"	The Best Means of Promoting Co-operative Production	J. Borrowman.
52	"	"	" " " "	G. J. Holyoake.
53	"	"	Some Hints on the Problem of Co-operative Production	J. M. Ludlow.
54	"	"	The Co-operative News.	T. Hayes.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
55	1873	Newcastle-on-Tyne	The Journalism of the Movement.....	G. J. Holyoake.
56	"	"	How to Increase Co-operation	P. H. Holland.
57	"	"	The Highest Form of Co-operation	Dr. Henry Travis.
58	1874	Halifax.....	Mode of Appointing the Central Board	E. V. Neale.
59	"	"	The Leakage Question	— Whiteley.
60	"	"	The Progress and Consolidation of Co-operation	Lloyd Jones.
61	"	"	The Future of Labour in Co-operation	E. O. Greening.
62	"	"	Co-operative Production	J. Borrowman.
63	"	"	A Plea for a Truly Co-operative Press	E. O. Greening.
64	"	"	The Best Form of the Co-operative Organ	J. T. McInnes.
65	"	"	Co-operative Propaganda.....	G. J. Holyoake.
66	"	"	Higher Education on Co-operative Principles.....	— Cunningham.
67	"	"	Equitable Distribution of Profits	J. Holmes.
68	"	"	Trade Unions in Relation to Co-operation	Lloyd Jones.
69	1875	London.....	The Schulze-Delitzsch System of Banking	W. Morrison.
70	"	"	Co-operation v. Individualism.....	R. Kyle.
71	"	"	Co-operative Production	E. O. Greening.
72	"	"	The Management of Productive Societies	F. Smith.
73	"	"	The Management and Best Form of Constitution to be given to Productive Societies, &c.	E. V. Neale.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
74	1875	London.....	The Present State of the Co-operative Movement and the Future before it	Bailey Walker.
75	"	"	Proposal of a National Industrial Orphanage.....	Dr. Rutherford.
76	"	"	Proposal for the Establishment of International Co-operation	G. J. Holyoake.
77	"	"	International Co-operation.....	Dr. Worrall.
78	"	"	Trade Societies' Funds and Co-operative Production	Lloyd Jones.
79	1876	Glasgow	The Policy of Paying High Dividends.....	E. V. Neale.
80	"	"	Organisation for Propaganda	J. Smith.
81	"	"	Co-operation and Trades Unionism	H. R. Slatter.
82	"	"	Hindrances to Productive Co-operation.....	R. Kyle.
83	"	"	How to Diminish the Risks and Increase the Benefits of Productive Co-operation.	W. Campbell.
84	"	"	Associated Healthy Dwellings; or, a New Plan of Practical Propaganda..	E. T. Craig.
85	1877	Leicester	Banking.....	T. Hughes.
86	"	"	A Special Means of Safe and Profitable Investment	W. Campbell.
87	"	"	The Accumulation of Capital	E. T. Craig.
88	"	"	How should Labour be Paid in Co-operation?	Lloyd Jones.
89	"	"	The Relation of Capital and Labour when engaged in Co-operative Production.	F. Smith.
90	"	"	Labour in Co-operative Workshops	J. Smith.
91	"	"	What Trade Unionists Might Do for the Worker through Co-operation ..	E. V. Neale.
92	"	"	Trade Unions and Co-operation	H. R. Slatter.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—continued.

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
93	1877	Leicester	Store Management	Lloyd Jones.
94	"	"	The Proper Position of Labour in the Co-operative Movement	R. Kyle.
95	"	"	The Place of the Labourer in Co-operation.	J. Greenwood.
96	"	"	The Failures of Industrial Partnerships	E. O. Greening.
97	"	"	Diffusion of the <i>Co-operative News</i>	G. J. Holyoake.
98	"	"	Re-establishment of Labour Exchanges	"
99	"	"	Educational Funds	G. Hines.
100	"	"	The Necessity of Co-operative Education, &c.	J. Holmes.
101	1878	Manchester	Working Men's Clubs	Hodgson Pratt
102	"	"	Co-operative Friendly Society	J. Odgers.
103	"	"	Co-operation and Culture	J. H. Jones.
104	"	"	The Development, Promotion, and Benefits of Education	R. Kyle.
105	"	"	Voluntary Propagandist Efforts	E. V. Neale.
106	1879	Gloucester	The Co-operative Union: Its Work, Duties, and Machinery	J. Borrowman.
107	"	"	"	R. Kyle.
108	"	"	"	E. V. Neale.
109	"	"	Co-operative Production	J. Odgers.
110	"	"	Spread of Co-operation in Agricultural Villages, &c.	G. Hines.
111	"	"	"	W. H. Hall.
112	"	"	The Attitude of the Co-operative Movement to Private Trade	E. V. Neale.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
113	1879	Gloucester	A Co-operative Review, &c.	E. T. Craig.
114	"	"	"	R. Newton.
115	"	"	A Co-operative Orphanage	Dr. Rutherford.
116	1880	Newcastle-on-Tyne	The Co-operative Union	R. Kyle.
117	"	"	Productive Co-operation	W. Swallow.
118	"	"	Wholesale Co-operation	Lloyd Jones.
119	"	"	Store Management	G. Scott.
120	"	"	Co-operative Cottage Building and the Land Question	T. Thirlaway.
121	"	"	Co-operation and the Perils of Credit	G. Hines.
122	"	"	The Land	E. V. Neale.
123	"	"	Education in Connection with Co-operation	J. Holmes.
124	1881	Leeds	Surplus Funds	J. Smith.
125	"	"	"	J. Crabtree.
126	"	"	The Land Question in Connection with Co-operation	Lloyd Jones.
127	"	"	Co-operative Production	J. Hepworth.
128	"	"	The Fundamental Principles of Co-operation	A. Greenwood.
129	"	"	Manual of Auditing	R. J. Milburne.
130	"	"	Organisation and Education	J. Holmes.
131	"	"	The Constitution of the Central Board	H. R. Bailey.
132	1882	Oxford	The Banking Question	J. Crabtree.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—continued.

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
133	1882	Oxford	The Banking Question	T. Hughes, Q.C.
134	"	"	Co-operation and Agriculture	Rev. G. W. Kitchen.
135	"	"	The Education of Co-operators	Arnold Toynbee.
136	"	"	" "	B. Jones.
137	"	"	The Revenue of the Central Board	John Allan.
138	"	"	" "	G. J. Holyoake.
139	1883	Edinburgh	The Present Position and Future Development of Co-operation	A. H. D. Acland.
140	"	"	" " " "	J. Lochhead.
141	"	"	The Banking Question	E. V. Neale.
142	"	"	Utilisation of Surplus Capital	Lloyd Jones.
143	"	"	" "	J. Lord.
144	"	"	The Best Means of Propagating Co-operation in Large Towns	J. Mc.Nair.
145	"	"	" " " "	W. Nuttall.
146	1884	Derby	The Nationalisation of the Land	G. Pureell.
147	"	"	Co-operative Farming	D. Johnson.
148	"	"	Surplus Capital	W. T. Nutter.
149	"	"	" "	J. Hepworth.
150	"	"	The Economic Aspect of Co-operation	E. V. Neale.
151	1885	Oldham	The Limited Liability Movement in Oldham	F. Hardern.
152	"	"	Difficulties of Productive Co-operation	T. W. Fenton.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—continued.

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
153	1885	Oldham	The Rise and Progress of Co-operation in Oldham	L. Feber.
154	"	"	Education in Connection with Co-operation	W. Crooks.
155	"	"	The Future of the Working Classes	E. O. Greening.
156	1886	Plymouth	Co-operative Education	Miss Sharp.
157	"	"	"	J. H. Jones.
158	"	"	Co-operative Production	J. C. Gray.
159	"	"	"	W. Swallow.
160	"	"	The Common Sense of Co-operation	E. V. Neale.
161	1887	Carlisle	Co-operative Agriculture	D. McInnes.
162	"	"	"	W. G. Loveday.
163	"	"	Co-operative and Competitive Trade and Dividends	D. Thomson.
164	"	"	"	T. Ritchie.
165	1888	Dewsbury	What should be the True Relations between a Wholesale Distributive Society and the Productive Societies whose work it may sell?	G. E. Quirk.
166	"	"	What should be the True Relations between a Wholesale Distributive Society and the Productive Societies whose work it may sell?	C. Shufflebotham.
167	"	"	Ought Productive Works to be carried on as Departments of Wholesale Societies; if so, under what conditions?	C. Shufflebotham.
168	"	"	Ought Productive Works to be carried on as Departments of Wholesale Societies; if so, under what conditions?	E. Copland.
169	1889	Ipswich	The Credit System	W. Swallow.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—continued.

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
170	1889	Ipswich	Co-operation and International Commerce	Vaughan Nash.
171	1890	Glasgow	The Relations between Co-operation and Socialistic Aspirations	Miss M. L. Davies.
172	"	"	Cash and Check Systems.....	J. Thirlaway.
173	"	"	Co-operation in Ireland	Hon. H. C. Plunkett.
174	"	"	Labour, Capital, and Consumption	E. S. Bycraft.
175	1891	Lincoln.....	The Best Method of bringing Co-operation within the Reach of the Poorest of the Population.	Sidney Webb.
176	"	"	How Best to Consolidate and Improve the Position of Productive Societies.	W. G. Harrison.
177	"	"	The Best Means of bringing Co-operation and Trades Unions into closer union.	J. Arnold.
178	"	"	How Best to Utilise the Increasing Surplus Capital of the Movement....	A. Maskery.
179	1892	Rochdale.....	The Best Method of Consolidating and Federating Existing Productive Effort.	J. Deans.
180	"	"	The Duties of Co-operators in Regard to the Hours and Conditions of Labour.	Tom Mann.
181	"	"	How Best to Do Away with the Sweating System	Miss Beatrice Potter.
182	1893	Bristol	The Relation of Employés to the Co-operative Movement	W. Maxwell.
183	"	"	Overlapping, its Varieties and Dangers	C. J. Beckett.
184	"	"	The Position Co-operators ought to take with regard to the Social and Industrial Problems of the Present Day.	R. H. Tutt.
185	1894	Sunderland	Store Management	W. Openshaw.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued.*

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
186	1894	Sunderland	Co-operative Agriculture	W. Campbell.
187	1895	Huddersfield	Co-operation as Applied to the Agricultural Population and to Agriculture.	D. McInnes.
188	1896	Woolwich	The Relation of the Co-operative Movement to National and International Commerce.	A. Williams.
189	"	"	Are Modifications in the Rochdale System of Co-operation necessary to Meet the Needs of Great Centres of Population?	G. Hawkins.
190	1897	Perth	The Rights and Privileges of Citizens, with special reference to the Scottish Traders' Agitation against the Co-operative Movement.	W. E. Snell.
191	"	"	Superannuation of Co-operative Employés	R. J. Wilson.
192	1898	Peterborough	Co-operative Credit Banking	H. W. Wolff.
193	"	"	Co-operation in Agriculture	J. C. Gray.
194	1899	Liverpool	How to Make Co-operation succeed in Large Centres of Population.....	E. O. Greening.
195	1904	Stratford	Reserve Funds and Depreciation	Thos. Wood.
196	"	"	Utilisation of Educational Funds	W. R. Rae.
197	1905	Paisley	Is Co-operation Capable of Solving the Industrial Problem?	G. Bisset.
198	"	"	Land Monopoly, or Land Values Taxation	J. M. Knight.
199	"	"	Direct Representation in Parliament	Thos. Tweddell.
200	1906	Birmingham	Overlapping: its Evils and Remedies	Jas. Johnston.
201	"	"	Co-operation in its Relation to Industrial Developments at Home and Abroad	H. W. Wolff.
202	1907	Preston.....	Co-operation in Housing and Town Buildings	A. Williams.

LIST OF PAPERS READ AT CO-OPERATIVE CONGRESSES SINCE 1869—*continued*.

No.	Year.	Place of Congress Meeting.	Title of Paper.	Name of Writer.
203	1907	Preston.....	Position of Employés in the Co-operative Movement	R. J. Wilson.
204	1908	Newport	The Small Holdings and Allotments Act, 1907, and its Relation to Distributive Co-operative Societies.	W. L. Charleton.
205	"	"	The Co-operative Movement Abroad.....	Hans Müller.
206	1909	Newcastle	Agricultural Co-operation and its Relation to Co-operative Distributive Societies.	Nugent Harris.
207	"	"	Agricultural Co-operation and its Relation to Co-operative Distributive Societies.	James Mastin.
208	"	"	Co-operation as a Remedy for Unemployment	A. Stoddart.
—	1910	Plymouth	No Papers were read.	
209	1911	Bradford	Co-operation in Relation to the Trust Movement	D. H. Macgregor.
210	1912	Portsmouth.....	The Co-operative Union and the Unification of its Forces	W. R. Rae.
211	1913	Aberdeen	The Best Means of Developing the Productive Side of the Movement....	W. G. Harrison.
212	1914	Dublin	Relationship of Agricultural Productive and Distributive Co-operative Societies.	G. Russell.

LIST OF INTERNATIONAL CO-OPERATIVE CONGRESSES.

Year.	Country.	Town.	President.
1895	England.....	London	Earl Grey.
1896	France	Paris	M. Jules Seigfried.
1897	Holland...	Delft	{ J. C. van Marken.
1900	France	Paris	{ Dr. M. W. F. Treub.
1902	England.....	Manchester	M. Jules Seigfried.
1904	Hungary	Budapest	H. W. Wolf.
1907	Italy	Cremona.....	Count Alexander Károlyi.
1910	Germany	Hamburg	His Excellency Luigi Luzzatti.
1913	Scotland.....	Glasgow	William Maxwell.
			William Maxwell.

THE CO-OPERATIVE UNION LIMITED.

HEAD OFFICES :

HOLYOAKE HOUSE, HANOVER STREET, MANCHESTER.

GENERAL SECRETARY : MR. A. WHITEHEAD.

BRANCH OFFICES :

GLASGOW : 263, WALLACE STREET, KINGSTON.

Sectional Secretary : MR. JAS. DEANS.

LONDON : 99, LEMAN STREET, E.

Sectional Secretary : MR. B. WILLIAMS.

NEWCASTLE-ON-TYNE : 84, WESTMORLAND ROAD.

Sectional Secretary : MR. W. CLAYTON.

WHAT IS THE CO-OPERATIVE UNION ?

IT is an institution charged with the duty of keeping alive and diffusing a knowledge of the principles which form the life of the Co-operative movement, and giving to its active members, by advice and instruction—literary, legal, or commercial—the help they may require, that they may be better able to discharge the important work they have to do.

WHAT HAS IT DONE ?

THE greater part of the legal advantages enjoyed by Co-operators originated in the action of the Central Board of the Union, and the Central Committee which it succeeded. They may be summarised as follows :—

- (1) The right to deal with the public instead of their own members only.
- (2) The incorporation of the Societies, by which they have acquired the right of holding in their own name lands or buildings and property generally, and of suing and being sued in their own names, instead of being driven to employ trustees.
- (3) The power to hold £200 instead of £100 by individual members of our Societies.
- (4) The limitation of the liability of members for the debts of the Society to the sum unpaid upon the shares standing to their credit.
- (5) The exemption of Societies from charge to income tax on the profits of their business, under the condition that the number of their shares shall not be limited.
- (6) The authorising one Registered Society to hold shares in its own corporate name to any amount in the capital of another Registered Society.

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- (7) The extension of the power of members of Societies to bequeath shares by nomination in a book, without the formality of a will or the necessity of appointing executors, first from £30 to £50, and now to £100, by the Industrial and Provident Societies Act, 1893, which also makes this power apply to loans and deposits as well as to shares.
- (8) The Industrial and Provident Societies Act, 1871, which enables Societies to hold and deal with land freely.
- (9) The Industrial and Provident Societies Act, 1876, which consolidated into one Act the laws relating to these Societies, and, among many smaller advantages too numerous to be mentioned in detail, gave them the right of carrying on banking business whenever they offer to the depositors the security of transferable share capital.
- (10) The Industrial and Provident Societies Act, 1893 and 1913.

The Union consists of Industrial and Provident Societies, Joint-Stock Companies, and other bodies corporate.

No Society is admitted into Union unless its management is of a representative character, nor unless it agree—

- (1) To accept the statement of principles in the rules of the Union as the rules by which it shall be guided in all its own business transactions.
- (2) To contribute to the funds of the Union the annual payment following:—

A contribution at the rate of 1½d. in respect to each member of each such Society, and calculated according to the number of members returned by each Society in its last Annual Return to the Registrar.

The financial year commences on January 1st in each year, and ends on December 31st following.

N.B.—Secretaries forwarding Cheques on account of the Union are requested to make them payable to the Co-operative Union Limited; Money Orders to N. H. COOPER, Cashier.

SUMMARY OF THE LAW RELATING TO SOCIETIES UNDER THE INDUSTRIAL AND PROVIDENT SOCIETIES ACT, 1893.

I. The Formation of Societies—

1. Application must be made to the Registrar of Friendly Societies, in London, Edinburgh, or Dublin, according to the case, on a form supplied by the office, signed by seven persons and the secretary, accompanied by two copies of the rules, signed by the same persons.

2. These rules must provide for twenty matters stated on the form of application.

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N.B.—Model rules on these twenty matters can be obtained from the Registrar's office; and the CO-OPERATIVE UNION LIMITED, HOLYOAKE HOUSE, HANOVER STREET, MANCHESTER, publishes, at the cost of 1½d. a copy, general rules, approved of by the Chief Registrar, providing also for many other matters on which rules are useful; and capable of being adopted, either with or without alterations, by a few special rules, with a great saving in the cost of printing.

The General Secretary of the Union will prepare such special rules, without charge, on receiving a statement of the rules desired.

II. Rights of a Registered Society—

1. It becomes a body corporate, which can by its corporate name sue and be sued, and hold and deal with property of any kind, including shares in other societies or companies, and land to any amount.

2. Its rules are binding upon its members, though they may have signed no assent to them; but may be altered by amendments duly made as the rules provide, and registered, for which a fee of £1 is charged. The application for registration must be made on a form supplied by the Registrar's office.

3. It can sue its own members, and can make contracts, either under its seal or by a writing signed by any person authorised to sign, or by word of mouth of any person authorised to speak for it, which will be binding wherever a contract similarly made by an individual would bind him.

4. It may make all or any of its shares either transferable or withdrawable, and may carry on any trade, including the buying and selling of land, and banking under certain conditions, and may apply the profits of the business in any manner determined by its rules; and, if authorised by its rules, may receive money on loan, either from its members or others, to any amount so authorised.

5. If it has any withdrawable share capital it may not carry on banking, but may take deposits, within any limits fixed by its rules, in sums not exceeding 10s. in any one payment, or £20 for any one depositor, payable at not less than two clear days' notice.

6. It may make loans to its members on real or personal security; and may invest on the security of other societies or companies, or in any except those where liability is unlimited.

7. It may make provision in its rules for the settlement of disputes between members and the society or any officer thereof, and any decision given in accordance with the conditions stated in the rules is binding on all parties to the dispute, and is not removable into any court of law.

8. If the number of its shares is not limited either by its rules or its practice it is not chargeable with income tax on the profits of its business.

9. It can, in the way provided by the Act, amalgamate with or take over the business of any other society, or convert itself into a company.

10. It can determine the way in which disputes between the society and its officers or members shall be settled.

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11. It can dissolve itself, either by an instrument of dissolution signed by three-fourths of its members, or by a resolution passed by a three-fourths vote at a special general meeting, of which there are two forms—(A) purely voluntary, when the resolution requires confirmation at a second meeting; (B) on account of debts, when one meeting is sufficient. In such a winding up hostile proceedings to seize the property can be stayed.

III. Rights of Members (see also IV., 4, 5, 6)—

1. They cannot be sued individually for the debts of the society, nor compelled to pay more towards them than the sum remaining unpaid on any shares which they have either expressly agreed to take or treated as their property, or which the rules authorise to be so treated.

2. If they transfer or withdraw their shares, they cannot be made liable for any debts contracted subsequently, nor for those subsisting at the time of the transfer or withdrawal, unless the other assets are insufficient to pay them.

3. Persons not under the age of 16 years may become members, and legally do any acts which they could do if of full age, except holding any office.

4. An individual or company may hold any number of shares allowed by the rules, not exceeding the nominal value of £200, and any amount so allowed as a loan. A society may hold any number of shares.

5. A member may nominate up to £100 of his holding in the society, whether in shares, loans, or deposits, by a writing recorded by it, and may revoke the nomination of any persons to take this investment at his death; and if he dies intestate, without having made any subsisting nomination, the committee of management of the society are charged with the administration of the fund; subject in either case to a notice to be given to the Commissioners of Inland Revenue whenever the sum so dealt with exceeds £80.

6. The members may obtain an inquiry into the position of the society by application to the Registrar.

IV. Duties of a Registered Society—

1. It must have a registered office, and keep its name painted or engraved outside, and give due notice of any change to the Registrar.

2. It must have a seal on which its name is engraved.

3. It must have its accounts audited by a Public Auditor at least once a year, and keep a copy of its last balance sheet and the auditors' report constantly hung up in its registered office.

4. It must make to the Registrar, before the 31st of March in every year, a return of its business during the year previous, and supply a copy of its last returns gratis to every member and person interested in its funds on application.

5. It must, once at least in every three years, make out and send to the Registrar, along with the Annual Return for the year, a special return showing the holding of each person in the society (whether in shares or loans) at the date to which the said Annual Return is made out.

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6. It must allow any member or person interested in its funds to inspect his own account and the book containing the names of the members.

7. It must supply a copy of its rules to every person on demand, at a price not exceeding one shilling.

8. If it carries on banking, it must make out in February and August in every year, and keep hung up in its registered office, a return, in a form prescribed by the Act; and it has also to make a return every February to the Stamp Office under the Banking Act.

The non-observance by a society of these duties exposes it and its officers to penalties varying from £1 to £50, which are in some cases cumulative for every week during which the neglect lasts.



Women in Industry.

BY JAMES HASLAM.

WE have in the title of this article a subject which brings us face to face with one of the most perplexing, and perhaps one of the most arresting, problems in the extensive realm of social and economic investigation. It is a problem, too, that has been forced upon us, or rather impressed, to some extent, upon the mind of the public only within recent years. Prior to the birth of the twentieth century only a comparatively few persons—persons usually fascinated by sociological study—displayed any special interest in the subject, and it was seldom that they had an opportunity of imparting their knowledge through popular sources. Owing also to the fact that no investigation of a really extensive character had been made, information of women workers, except in old-established trades, was incomplete and incoherent, and consequently unreliable. It was impossible to work out a comprehensive or trustworthy survey of wages and conditions of labour from previous publications.

It is still difficult to do this with anything like scientific precision. But those who have been accustomed to pursue the subject, and make progressive notes upon it, must have been vastly encouraged by the overwhelming facts and figures that have been brought to light during the sex and social restlessness of the past few years. The revelation has been appalling in its sordidness. It has been encouraging only in the proof of an awakened interest, and a stimulated public consciousness in regard to conditions that have been discreditable to civilisation, and in proof also of a determination to marshal facts in preparation for local and national effort to remove deep and widespread grievances, the evils of which no man or woman could now fully trace; they have gone to the grave with the girls and the women who have been their victims.

There is no subject to-day of more importance, nor one that is likely to have more effect upon the conditions of society in future, than that of women in industry. How to deal with it adequately in the space to be encompassed in this contribution is one of the difficulties that would present itself to any writer who has given much time to study and inquiry regarding it. In recent years the subject has forced itself upon us with alarming strides; it has been contemporary also with the rise of various activities, new impulses, and desires on the part of females; and anybody who

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thinks at all must be asking himself, or herself: What is the cause of the increasing cry of woman for a more active share in the work of the world, for greater social and political liberty, for industrial conditions of equality with that of man—in fact, for the right to regulate and control her own life under conditions which have not been permitted hitherto? What does it all mean? Whither is it leading us? What is to be woman's place in the society of the future?

It is not my object to deal with these phases, or to attempt to provide an answer to them. Men and women in widely different capacities are wrestling with the grave, yet somewhat fascinating, problem, which the interrogations involve or suggest. Politicians, social scientists, trade union leaders, local governing authorities, employers of labour, and others are finding themselves, day after day, being more bound by the questions which the problem, in the course of its evolution, is thrusting upon them. There will be no escape from it; it will have to be faced. The past is dead. And the newer activities, and the newer outlook of women, are playing a greater part than most of us are aware of, perhaps, in the preparation and the formation of the new social world we are about to enter.

But my only province here is to treat of women in industry. I have no intention of going into any "ancient" history of this subject; it is too much of a live problem of to-day, and of the immediate future, to waste time in constructing readable phrases of things no longer with us. I want to endeavour to present the living facts as we have them before us at this moment. I should like to say, nevertheless, that the advance of woman in industry has now become so prominent, and so permanent as a feature in national life, that even our biologists are concerning themselves about it. In a joint work on *Sex*, only recently written by Patrick Geddes (Professor of Botany, University of St. Andrews) and J. Arthur Thomson (Professor of Natural History, University of Aberdeen), the question is asked, "What may be the place of woman in the contemporary transformation of the industrial age?" Professor Karl Pearson, in an essay on *Woman and Labour* (1894), contended that woman's problem of the future was "to reconcile maternal activity with the new possibilities of self-development open to women." This, he said, was *par excellence* their problem. "It is not one," he also wrote, "which can be solved by 'equality of opportunity,' but solely by the recognition of maternity as an essentially social activity, by the institution of some form of national insurance for motherhood, and by the correlated restriction and regulation of woman's labour." Since these words were written, twenty years ago, the nation has recognised the necessity of national insurance for motherhood in the maternity section of the National Health Insurance Act, and the regulation of labour in a very special sense in the Trade Boards Act, though women's

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labour has been long regulated by the Factory Acts. But the restriction of women's labour is another matter altogether. The tendency of industrial changes has seriously lessened this restriction, and the probability is that in future sex (except through physical causes) will not be a barrier, as it has been, traditionally, in the past, to social and industrial activities, whether of men or women. The point, however, I wish to emphasise is that the scientists' desire to secure regulation of labour, with the object of making it more compatible with woman's maternal function, does not go far enough. Beyond this, the woman worker of the future will demand economic justice and more freedom from the selfish and, in too many instances, cruel form of exploitation which has stained our pages of industrial history, so far as the employment of women is concerned.

No one, however, can have gone closely into the awakening which has taken place during the past few years without having observed one great change that has come over any operations directed towards the full emancipation of women; and that is, that whereas women's subjects were once investigated and judged only by men, comparatively speaking, women themselves have not only come forward to investigate, to analyse, and to pass judgment, but they are determined to wrestle with the problem themselves, and be the foremost in helping towards, and in urging and demanding a solution. This is important and will have a far-reaching effect; for it means that, however backward men may be either in understanding or dealing with the problem, however cynical, narrow-minded, or parasitical some of them may remain with regard to the newer resolve and the newer outlook of women, the women themselves are determined to make their own progress. Men may or may not be wise enough or sensible enough to work side by side with the women as social comrades; but what I want to say is, that it does not depend upon men so entirely as it has done heretofore; the new factor in the problem is the perception of women themselves, that, if women's wrongs are to be righted, women themselves will have to understand and champion the cause. The test of one's value to society in the twentieth century is not to be sex alone, but service to the well-being of the community. We would seem to be on the brink of a newly-constructed society, a new world, in which opportunity must be given to women for larger development; for freer exercise of their capacities; for better chances of attaining a level of equality with men, in extending to family existence and the advancement of the State every condition necessary to the exaltation of human character and the fulness of life in any and every grade of society.

THE NUMERICAL POSITION OF WOMEN WORKERS.

Now, I am going to take the view that in no grade of society are the foregoing remarks more applicable than among the working

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classes. They have the most to gain by better and higher conditions, at any rate, of social, industrial, and political life. They have the most to obtain from the true progress of democracy. And if they are to take their proper place in the society of the future they must have more justice extended to them, more leisure, more education, more control of the means of life, regarding either physical or mental requirements. And to no one is the subject of women workers of more vital importance. Their women-folk do not work to provide themselves with a useful hobby, or to satisfy some passing whim; their working-class women—the child-bearers of the industrial race—are wage-earners and bread-winners in real earnest. They should be the very first to rise against that practice which has prevailed now for too long—that is, the practice of underpaying women for industrial service merely because they are females; this custom of exploiting our wives and daughters and sisters, yea, and our mothers and grandmothers, has had a disastrous effect upon the economic and moral welfare of working-class life. Hence, who should be more interested in the advancement of women workers than working men? And as women have realised that they must solve their own problems, so the working classes must deal with their own difficulties and aims in their own way, and learn to utilise the failures of self-effort as stepping stones to success. But we must, first of all, perceive that there can be no really sound progress in working-class life without the application of high principles to women in industry.

However, let us see, in the first place, what is the numerical position of women in industry, and to what extent they have gained upon males in industry. It is in the continually increasing numbers of female workers that we shall realise we have before us a grave social problem. In the industrial life of the nation the place and power of females are growing rapidly. However much longer women in other grades of society may be prepared to play the satellite to man in the social affairs of life (and this is becoming less in evidence), women are becoming a greater and greater part of the industrial strength of the nation; almost every day England in particular becomes more seriously involved in the problem of female labour.

During the past twenty years females have been employed in occupations that were previously wholly monopolised by males. But if we go back to 1841, when, according to writers like Frederick Engels, the working classes of northern industrial centres lived under deplorable housing and sanitary conditions, we find that women were beginning to increase at a more rapid rate than men in certain groups of well-defined industries. This may be graphically illustrated by a tabulated series of figures which I have taken from an edition of *The Evolution of Modern Capitalism*, by Mr. J. A. Hobson, published in 1894, and reproduced herewith.

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MALE AND FEMALE EMPLOYMENT IN MANUFACTURES, 1841-91.

Trades.	1841.		1851.		1861.		1871.		1881.		1891.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Earthenware	23,600	7,400	34,800	11,700	42,500	13,400	49,700	17,700	52,200	19,700	64,800	23,800
Fuel, Gas, Chemicals	5,800	900	16,400	1,700	24,800	1,500	34,900	4,100	44,000	4,000	66,400	6,300
Fur, Leather, Glue	31,600	2,400	44,500	6,500	47,800	8,800	49,400	10,200	49,400	13,800	59,100	18,200
Wood Furniture, Car- riages, &c.	147,500	4,900	180,200	8,900	202,200	14,100	214,200	19,500	221,600	18,400	253,600	23,900
Paper, Floorcloth, Waterproof, &c.	8,900	3,200	13,600	8,900	14,600	10,700	20,900	13,400	24,600	23,200	28,600	34,200
Textiles, Dyeing	346,200	257,600	462,400	472,100	439,700	526,500	414,500	555,500	396,400	566,200	430,500	585,600
Dress	343,600	177,200	397,500	471,200	378,600	550,900	363,300	552,700	344,700	609,300	353,800	681,300
Food, Drink, Smoking ..	82,700	8,000	120,900	12,400	133,400	15,600	145,700	18,500	152,300	28,900	173,100	50,200
Watches, Instruments, Toys	19,600	800	23,500	1,300	32,900	2,900	35,900	3,000	41,700	3,400	44,600	5,500
Printing, Bookbinding, &c.	21,100	1,800	30,400	3,800	41,300	6,200	57,600	8,600	75,000	13,100	102,100	19,100
Totals	1,030,600	463,600	1,324,200	937,900	1,357,200	1,150,100	1,385,500	1,203,200	1,401,900	1,293,500	1,576,100	1,447,500

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The figures, of course, speak for themselves. The totals show at a glance the gradual ascendancy of females over males. This is attributed to the development of machinery in manufacturing processes, which could be tended by females, and which were in some cases more adapted to the industrial qualifications of the female sex; but another factor which undoubtedly helped the gradual rise of females in number was that they could be secured at cheaper rates. Whilst this circumstance was an obstacle to the economic improvement of working-class family life, it was readily taken advantage of by capitalists in competition one with another.

However, the table which I have given indicating the progress of females in industry leaves us with the numerical position as it was in 1891. I shall not attempt to bring these identical figures up to date, because, owing to the variations made in the census returns, the task could not be done, in all probability, with accuracy. But, so far as the figures go, in the groups of trades enumerated, it is clear that there was a remarkable advance in regard to the employment of female labour. Let us now see the numerical relationship between males and females in nine groups of our manufacturing industries, as shown in the occupational census returns of 1901 and 1911:—

Trades.	Number of Persons Employed in 1901.		Number of Persons Employed in 1911.	
	Males.	Females.	Males.	Females.
Precious Metals, Jewels, Watches, Instruments, and Games (including Electricity Supply).....	148,491	19,853	122,664	25,153
Wood Furniture, Fittings, and Decorations	276,591	31,041	344,509	36,003
Brick, Cement, Pottery, and Glass	152,795	37,061	183,896	42,707
Chemicals, Oil, Grease, Soap, &c.....	118,244	31,431	155,245	42,748
Skins, Leather, Hair, and Feathers	90,672	27,194	97,937	34,564
Paper, Prints, Books, and Stationery	219,621	114,640	252,880	145,623
Textile Fabrics.....	594,742	867,259	677,177	958,907
Workers and Dealers in Dress	492,149	903,646	511,880	895,298
Food, Tobacco, Drink, and Lodging	929,049	372,027	1,067,164	543,853
Totals.....	3,022,355	2,404,152	3,413,351	2,724,856

It may be repeated that the above list of industries embraces nearly the whole of our manufacturing trades. The position of females, it will be observed, has been well maintained during the ten years covered by the statistics. Males increased by 390,996, and females by 320,704. However, the figures clearly indicate to what a large extent we are dependent upon the services of females

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in the continual output of our manufactured goods. I shall endeavour to show, later on, how unfairly we have rewarded them in the form of wages.

According to the census of 1911 the following was the number of males and females over ten years of age occupied as wage-earners and profit-makers in the United Kingdom:—

Country.	Males.	Females.
England and Wales	11,453,665	4,830,734
Scotland	1,473,757	593,210
Ireland	1,387,198	430,092
Totals	14,314,620	5,854,036

The total number occupied in 1901 was:—Males, 12,951,186; females, 5,309,960. Of the 5,854,036 females employed in 1911 there were 2,045,563 engaged in domestic offices or services, thus leaving 3,808,473 at work in an industrial, a commercial, and professional capacity. It is surprising how great has been the development among women in connection with many of our industries, and in such trades in which females a few years ago were almost unknown. As iron and steel workers in England and Wales the growth of women from 1901 to 1911 was 19·4 per cent., and that of men 11·9 per cent. In the making of tinplate goods men decreased by 10·5 per cent., and women increased by 86·1 per cent.! In white-plated ware men decreased by 1·2 per cent., and women went up by 31·2 per cent. In brassfounding, finishing, &c., men declined by 12·9 per cent., and women ascended by 20·3 per cent. There was also a diminution of men employed in the manufacture of precious metals, jewellery, watches, &c., to the extent of 2·9 per cent.; on the other hand, females came out with an increase of 26·3 per cent. Even when we come to the making of scientific instruments and photographic appliances, in which accuracy and patience are required, we find that women were added to, during the decennial period, at the rate of 80·1 per cent., and men at the rate of 53·0 per cent.

And so one might proceed with numerous other proofs that females are entering even metal trades at a greater rate than males are—trades held exclusively by males only a few years ago. It is, in fact, surprising how our sisters, wives, and mothers have been provided with employment in almost every character of engineering work, where machinery has gradually displaced the strength, endurance, and the old hand skill of men. Females have to take their place in the making of nails, rivets, heavy chains, in "general engineering" and machine making, in the manufacture of textile fittings, of machine tools, gas-fittings, and of metal requirements of various descriptions. In England and Wales, from 1901 to 1911, females in the making of gas-fittings increased

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by 170·8 per cent. and men by 145·1. Respecting furniture, fittings, and decorations, women again had the greater percentage of increase, as they had in earthenware manufacture. In 1881 there were 62 women to every 100 men in the making of earthenware, china, and porcelain goods; this proportion had risen to 73 to the 100 in 1911. Hence, measured by percentage, the pace of woman is quicker than that of man. Few occupations are now free from the advance of our sisters. In printing, lithography, and bookbinding they recorded an increase of 43·9 per cent. from 1901 to 1911, compared to 17·6 per cent. respecting men. Woman is taking the same course that man has done in the gradual acquisition of rights and liberties; year by year she becomes a greater industrial asset; year by year she will realise strength in the nation's dependency upon her industrial skill and training; year by year she will rise from a low to a higher economic position in social, industrial, and family life; from the higher economic ground she will proceed to greater industrial justice for herself and her sisters; and by the extension of her industrial position, and her indispensable place in factory and workshops organisation, she will enlarge her perception of the value of trade union and political power. We are told that in the census of 1831 (the year preceding the passing of the great Reform Act) many householders made no attempt to enter their women-folk in the population columns as separate beings from themselves. They were the little lords of creation. They lumped their wives and children and female servants together, and counted them as one person along with the householder. In many cases females were returned as belonging to neither agricultural, industrial, nor commercial classes; there were not a few instances in which females were left out of the returns altogether as being of no account. But times have changed! Woman has continued to push her way into various activities of life and work, and in no class is her advance more persistent than in that of the industrial necessities of the nation. What does it all mean? What will be the outcome of it in regard to the sex and economic circumstances of society? In *The Evolution of Modern Capitalism*, Mr. J. A. Hobson wrote:—

Modern manufacture with machinery favours the employment of women as compared with men. Each census during the last half century shows that in England women are entering more largely into every department of manufacture, excepting branches of metal work, machine making, and shipbuilding, &c., where great muscular strength is a prime factor in success.

It is twenty years since that was written, and since then women have entered several of the metal trades from which they were barred at that time.

AVERAGE EARNINGS OF FEMALES IN EMPLOYMENT.

From the foregoing pages we have seen, or measured, the numerical position of women in industry. We have perceived that

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in many trades females are increasing at a greater percentage rate than men are. We have next to gather some particulars about the way that our women workers are compensated in actual wages for their industrial service. The whole of the pages of this contribution might very well have been occupied with the gloomy facts of this section of the subject alone. From the point of view of wages society's treatment towards the women is not one of which we can be justly proud. Of late years the economic conditions of females in industry have improved, and that improvement continues. Let us hope that it will not be set back.

In 1906 the Board of Trade made a very wide and detailed investigation into the wages of workers in almost every industry in the United Kingdom. On the whole, wages are not much different to-day. In some instances they are slightly higher, and in other instances slightly lower, according to the periodical rising and falling of wages rates in all industries. There has, perhaps, been a greater tendency towards higher rates among females than among males, owing to the awakening of public consciousness, and the interference with wages rates among sweated industries—mainly composed of women, forsooth—by the Government. The effect of the Trade Boards Act of 1909 has been encouraging. But I shall allude to this at greater length when dealing with the lowest-paid trades.

The figures which I now wish to present are based upon the earnings of women for one full week—the last pay-day week—in September of 1906. I am relying upon this week of 1906, because we can get from it the most complete return on earnings and hours of labour that has ever been issued by any organisation or any State department. And, in order to indicate the low estimate that has been put upon girls and women as industrial workers, I shall compare their earnings with those of boys and lads. It will be seen that the wages of women over eighteen years of age are much the same as lads under twenty; as a matter of fact, in some cases they do not reach the standard paid to mere boys.

At this time, when many people are claiming for women who perform work equal to that of men a wage equal to men's wages, it is important that we should realise that they have been up to the present rated with boys. Even if we leave aside the relative value of the work performed by women and by boys of comparatively tender age, it may still be argued that a worker employed in any industrial pursuit during the full working hours of the week should be paid a sufficient wage to provide food, clothing, and shelter. A very large percentage of adult women workers do not earn that life's sufficiency; they cannot provide themselves with a decent livelihood, and, in spite of a hard week's work, they must, perforce, rely upon charity, or the help of relatives at every emergency that arises. The measure of injustice meted out to adult women is further emphasised when we remember

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that whilst a lad receives a greater wage than she, he, when he becomes an adult, has the opportunity in skilled trades of having his wages advanced to anything from 100 to over 200 per cent. in excess of the earnings of grown-up women. The outlook of the woman worker is seriously handicapped in this respect: as girls they are rated at a lower standard than boys. As adult women they occupy the level of lads from fourteen to twenty years of age. And they remain in that position whilst lads go ahead.

However, in order to show clearly the position of girls and adult women as compared with boys and lads, I have compiled three tables. The first shows industries in which the wages of women are fairly higher than the wages of lads; the second tabulates trades in which lads and women's wages are pretty much alike; the third deals with industries in which adult women's wages are lower than those paid to lads. Each table gives the wages for a full week's work. The first table is as follows:—

Trades.	Lads and Boys.	Women.	Girls.
	s. d.	s. d.	s. d.
Printing	8 7	12 3	6 4
Bookbinding.....	8 8	12 10	6 0
Paper, Stationery Manufacture.....	8 6	11 11	6 6
Wallpaper: Process Block Making	9 7	18 9	9 5
Baking and Confectionery.....	9 6	12 8	6 5
Chocolate Workers	9 8	14 10	6 7
		(Piece Rates.)	
Musical Instrument Manufacture.....	9 2	15 9	8 3
Umbrella, Parasol, and Stick Making..	10 7	15 7	6 11

We will now take the second table:—

Trades.	Lads and Boys.	Women.	Girls.
	s. d.	s. d.	s. d.
Cardboard, Canvas, &c., Box Manufacture	10 3	12 3	6 1
Earthenware, &c.	11 2	11 11	6 2
Chemical Manufacture	10 3	10 8	7 4
Lime, &c., Works	11 9	13 1	—
Soap and Candle Makers	11 0	12 5	8 6
Salt Works	9 8	10 1	6 11
Glass Industry	9 1	10 6	6 11
Preserve Foods, Jam, Pickles, &c.	10 4	10 11	6 7
Biscuit Manufacture	9 10	10 10	7 1
Aerated Water Manufacture	9 6	9 7	7 4
Tobacco, &c., and Snuff Manufacture...	9 9	12 0	6 2
Leather Tanning and Dressing	11 0	12 11	9 2
Brush and Broom Makers.....	9 11	10 6	6 7
India-rubber, Gutta-percha, &c.	9 11	12 8	7 9
Linoleum, Oilcloth	10 5	12 9	7 2
Miscellaneous Leather Goods	10 5	12 8	6 6
Miscellaneous Industries	10 7	12 5	6 9

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The third table (showing in which trades women receive less wages than lads and boys) is as follows:—

Trades.	Lads & Boys.	Women.	Girls.
	s. d.	s. d.	s. d.
Brick, Tile, Pipe, Fire-clay Ware.....	11 6	11 5	9 4
Glass Bottle Makers	12 1	8 9	7 1
Explosives Manufacture	15 5	13 1	8 1
Grain Milling	11 0	10 1	5 5
Malting and Brewing	10 5	9 4	7 5
Chocolate Workers	9 8	9 2	6 7
Confectionery Workers	9 8	(Time Workers.) 9 1	6 7
Sugar Refining	12 3	(Time Workers.) 10 6	7 7
Spirit Distilling	12 3	10 2	7 6
Oil-seed and Oil-cake Manufacture.....	13 8	10 8	—

In all the above trades female workers are poorly organised as regards trade unionism; in many of the trades there is no trade union at all. It is in the textile industries where females are the best organised, and where, on the whole, there is a greater disparity between the wages of lads and women, to the advantage of the women. In order to make our comparisons complete I have compiled the following table of textile trades:—

Trades.	Lads & Boys.	Women.	Girls.
	s. d.	s. d.	s. d.
Cotton	11 6	18 8	10 1
Woolen and Worsted	8 10	13 10	8 4
Linen	7 8	10 9	6 7
Jute	10 11	13 5	9 8
Silk	8 2	11 2	6 4
Hosiery.....	9 5	14 3	7 9
Lace	12 8	13 5	7 1
Fustian and Cord Cutting	9 8	10 10	8 1
Bleaching, Dyeing, &c.	10 8	12 4	8 2

Other trades that may be cited are:—

Trades.	Lads & Boys.	Women.	Girls.
	s. d.	s. d.	s. d.
Dress, Millinery, &c. (factory)	9 11	15 5	6 4
Tailoring (ready-made)	8 11	11 10	5 1
Tailoring (bespoke).....	6 11	14 2	5 5
Shirt, Blouse, Underclothing	8 9	13 4	6 9
Boot and Shoe	10 4	12 4	6 9
Silk Hat and Felt Hat.....	12 7	16 4	7 8
Dyeing and Cleaning.....	10 7	13 10	7 2
Laundry (factory)	8 9	12 10	6 6
Laundry (workshop)	9 4	12 9	6 7

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These figures give a clear indication of the general lowness of women's wages, even in trades that are mainly on a higher level than those that are branded as "sweated." But they do not tell the whole of the sorry story. At any rate, they demonstrate the economic position of grown-up women as compared with male youths in a remarkable way. The position, too, is worse than the figures, bad as they are, would lead one to perceive. For instance, the average wages for "boys and lads" are lumped together—that is, the average is one made up from the total earnings of all males below twenty years of age. With regard to women the average is that of all women above eighteen years of age. Hence, if the average for all females were based on the same age condition as that of boys and lads, women would compare still worse with males who are below the age of domestic responsibility. What it means is that the mother of a family, who, through one circumstance or another, may be the principal bread-winner, is rated, as a wage-earner, on no higher level than the majority of youths at any age from sixteen to twenty years.

In the factories and workshops of the United Kingdom, or, at any rate, of Great Britain, there are well over 2,000,000 girls and women employed. The Duchess of Marlborough recently estimated, after an investigation, that, in all probability, 300,000 women in "organised" industries receive less than 12s. per week. This alludes to "women," not girls. But if you take the average earnings shown in the tables above, and consider that deductions are being constantly made through sickness, breakdowns of machinery, trade depression, seasonal slackness, shortness of raw material, general and statutory holidays, it will be seen that a very great number of our adult women workers do not obtain 12s. per week the year round. It has been estimated by the Women's Industrial Council that the minimum sum necessary to meet the minimum requirements of a desirable life of a single woman is 15s. per week. This is for a single woman. What about the thousands of married women and widows, who have dependents in the way of underpaid or unemployed husbands, infirm or unemployable husbands, or young children? But the 15s. standard is certainly low enough. It was stated by Mr. Barnes (an officer of the Board of Trade) before a Select Committee of the House of Commons, in July, 1913, that out of 500,000 women whose wages had been estimated by the Board of Trade, 19 per cent. earned less than 10s. per week. Take the groups I have enumerated above; there are fifty-four of them. The average earnings for a full week's work was less than 15s. per week in forty-eight of the groups; it was under 14s. in forty-five of the groups; it was under 12s. in twenty-three of the groups; it was under 11s. in seventeen groups. Hence, when you consider the deductions to which I have alluded, it will be perceived that there is very much yet to be done before

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a standard of economic independence can be secured for adult women workers. If we next look at the wages of girls (females under eighteen years of age) we shall find that they occupy a very poor place in our industries as compared with boys. The labour they perform in many trades, however, is not necessarily of less value to the life and upkeep of the nation; their outlook at present is not encouraging; they proceed from a low standard as girls to a low standard as women. With boys it is the other way about. There is nothing, perhaps, that tends to destroy the dignity, the health, virtue, and the independence of workers so much as inadequate wages or earnings that will not purchase the common requirements of the week. To many young women it means moral ruin. If women must work, either out of sheer necessity, or for the purpose of maintaining personal independence, or even for the cheapness of production, it is not fair to expect a high standard of dignity, refinement, and morality from them if they, as adult creatures, are kept to the level of, or below, the economic plane of lads. To leave them in this position is to perpetuate a grave national discredit. Of course, it should be explained that one does not get a full understanding of the economic circumstances of women workers by viewing the subject from the basis of average earnings given in the form of bare statistics. Obviously, some obtain a higher wage than the calculated average, whilst many fall below that standard. If you were to go through the voluminous returns from which I have compiled the above tables, you would observe that thousands of women workers—adult women workers—do not earn 10s. per week for full employment. Indeed, many are rewarded for the week's task with so little a sum as 7s. 6d., and, shame to say, some even come so low as 5s. A bare recital of the figures should be sufficient to condemn them!

“SWEATED” AND LOW-PAID INDUSTRIES.

Below the level of earnings already dealt with there is an underworld of women workers whose conditions are indescribable. These are, perhaps, among the less organised industrial servants, among whom exploitation for private profit and competitive purposes has been untrammelled. It would be impossible to investigate the terrible results. There was no hope at all for these workers when left absolutely under a *laissez-faire* policy. But, happily for some of them, Parliamentary interference came to their assistance, and all past traditions regarding the free right of employers to exploit whom they may, and where they may, were swept aside by the establishment of a minimum wage through the Trade Boards Act. As a result of the persistent work of the National Anti-Sweating League, this Act passed through both Houses of Parliament without opposition in 1909. Its free passage

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was one of the clearest signs we have had of an awakening public conscience in behalf of under-paid and semi-starved women workers. It took some time, of course, to get the Parliamentary measure into operation. I am not concerned here, however, with the Act and its mode of procedure, so much as with the results of its application. Its object was, briefly, to establish a minimum wage for workers whose earnings were indisputably low and were inadequate for the commonest necessities of life. It was directed, in the first place, to four trades in which the rates of pay were exceptionally low. These were chain making, lace finishing, paper-box making, and ready-made and wholesale bespoke tailoring. These trades comprised about 250,000 workers, mostly women. Numerous difficulties presented themselves in the endeavour to make the legislation operative, and to fix the minima for the various sections of the workers affected. But most of these were overcome, and it may be stated that, generally speaking, the Wages Boards that were formed and established under the Act succeeded in raising the earnings of women in chain making from 5s. and 6s. to 10s. 6d. a week, and in some cases higher. This cannot be considered a luxurious weekly income for such an arduous task, but it is better than a mere pittance of 5s. and 6s. Female outworkers in this grimy and laborious occupation were similarly advanced. Although the minimum arranged for lace and net finishers amounted only to 2 $\frac{3}{4}$ d. per hour, it was from 80 to 100 per cent. more than had been paid before the compulsory powers of the Act. Under favourable conditions of trade females occupied in the manufacture of paper and cardboard boxes used to earn from 8s. to 9s. a week, and many less than the lower sum. It was estimated that the average wage for a full week's work was 8s. per week. The legalised minimum is now 13s. per week. In ready-made and wholesale bespoke tailoring the wages have been raised from 8s. to 10s. a week to a minimum of 14s. 1d. for adult women workers. These are simply bare statements of what the Act has achieved in regard to adult workers. The effect has been to raise the efficiency of the workers, to improve the administration of the trades, to advance the commercial methods of the employers, and to increase the numerical strength of trade unions. The Act has fixed wages rates for learners and juvenile operatives, and has, in consequence, achieved more for the moral and physical welfare of girls than most people can be aware of; in this respect its worth to the nation can be perceived only by scanning through the list of wages which are so meagre that it is not to be wondered at that many young and unprotected girls are tempted, and fall into sin years before they can understand how deep and black is the pit into which they have stumbled, or have been pushed into by economic conditions that are, without doubt, a shame to British industry. Prior to the Trade Boards Act there were women chain workers labouring at heavy, dirty, depressing

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work for 4s. 6d. a week; added to the wearying toil in the forge was the incessant burden of domestic duties under the most trying and the most impoverished conditions. In tailoring the lowest weekly wage for grown-up females is 14s. 1d. per week. Before the interference of legislation 10 per cent. of the women tailors received less than 8s. per week, 20 per cent. less than 10s. In paper-box making over 10,000 women over eighteen years of age received less than 10s. a week. Hence, the Act, so far as it has been applied, has been a blessing to women and children. Employers now praise it; it has increased the standard of their production, or has had that effect. The nation should now insist upon its extension.

In March of 1914 Mr. Sydney Buxton (then President of the Board of Trade) announced in the House of Commons that the Government had decided to include four other trades. These were sugar confectionery and food preserving, shirt making, hollow-ware making, and linen and cotton embroidery. The number of persons employed in these occupations are, approximately, 150,000. It has been suggested that the extension should include laundry workers; if so, 110,000 workers would be added to the list. However, the employes connected with the trades in question are mainly females, and in far too many cases the conditions of their labour are very bad. One does not like to hear of "filthy details" in connection with sugar confectionery and food preserving occupations. But such is the case, although many concerns provide excellent conditions and superior workers. The trades under this heading include the manufacture of cocoa, chocolate, jam, marmalade, preserved fruits, fruits and table jellies, meat extracts, meat essences, sauces and pickles, and the preparation of a variety of flesh meats. It is essential for the sake of public health that the operatives should be clean and exercise the greatest care with regard to cleanliness. But how can that be accomplished when their environment in too many instances is discouraging from this point of view? The reports of Home Office factory inspectors not infrequently testify to the uncleanly state of the workrooms. The economic standard of the workers is no better. In these trades, and also in tea packing and biscuit making, Mr. J. J. Mallon (secretary of the Anti-Sweating League) says that an inquiry of the Christian Social Union showed that their earnings were:—

	s.	d.
Girls, 14 years	4	9
Girls, 15 years to 18 years	6	4
Girls, 18 years and over	11	5
Married Women	8	11

Continuing, Mr. Mallon writes:—

We may profitably compare with these the still more authoritative figures of the Board of Trade inquiry of 1906, which, however, apply to the whole of the United Kingdom.

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	Women (over 18).	Girls.
	s. d.	s. d.
Cocoa, Chocolate, and Sugar Confectionery.....	11 9	6 7
Preserved Food, Jam, Pickle, Sauce, &c.....	10 11	6 7

But what is wrong with a trade is often concealed in average figures. Looking beneath them in this instance we find that in the first of the two given groups 40 per cent. of women received less than 10s., nearly 30 per cent. less than 9s., and actually one woman in five less than 8s a week.

In the food preserving group the percentage receiving less than 10s. is higher, 44.3, but the other percentages are less.

But probably the most enlightening figures of the Board of Trade inquiry are those in which the earnings of workers are classified in occupation groups:—

		WOMEN (over 18).			
		Average Earnings.		Lower Quartile.	
		s.	d.	s.	d.
Confectionery Workers	Time	9	1	7	6
"	Piece	11	8	8	6
Chocolate Workers	Time	9	2	7	0
"	Piece	14	10	11	6
Weighers, Fillers, Wrappers, Labellers, Packers,	Time	9	8	8	0
"	Piece	11	8	8	6
Other Women	Time	10	6	—	—
"	Piece	11	8	—	—

Indeed, it is computed that one-fourth of the time workers in the confectionery trade receive *less* than 7s. 6d. a week. I am very much tempted to enter into a long treatise on the economic conditions of adult women workers who may be described as being on this scandalous wages level. But even a bare enumeration of the list of trade and wages would take up too much of the space here at my disposal. I dare not peep into the documents before me for fear I should be induced to reproduce the dispiriting facts. Shirt making alone is full of tragic details in the fields of women's labour. In some respects it may not be so bad as it was when Tom Hood aroused the sympathy of England with the "Song of the Shirt," written for the Christmas number of *Punch* in 1843. But it is still stained with "poverty, hunger, and dirt" to a degree that ought to shock the refinement of civilisation. Except in co-operative establishments, wages for shirt making are on a very low scale, and in some parts of the United Kingdom, notably in Ireland, they range, generally, from one penny to twopence per hour.

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In dealing with shirt makers one has to remember that it is an occupation which includes a large number of home-workers, among whom wages are seldom above 10s. per week; usually, they vary from 5s. to 8s. per week of long hours and strenuous labour. In factories many shirt makers, working at piece rates on power driven machines, can earn 15s. and 16s. a week. The effect of the Trade Boards Act would be to place the rates of home and factory workers on a better and a more equal basis. It is difficult to estimate the changes in life and character that would be wrought by the economic improvement. But to let home-workers stop where they are and as they are is foolish, dishonourable, and costly. To find them one has always to wander through a labyrinth of mean streets; they dwell either on the hem or in the heart of areas of petty crime and blackest poverty: the veritable Jago of dirty streets and courts and backyards, sloppy with filth. Indeed, far too many of us are unaware of the wretched surroundings in which quantities of the goods we wear are made. We should shudder if we could always realise the truth when we put them on. I have brought upon myself fits of anger and depression in visiting the dark city regions of home-workers in England, Ireland, Scotland, and Wales. I have come away more than once swearing that I would never go again. Only a few weeks ago I paid a visit to one or two of these social Hades within a short distance of the palatial premises of the C.W.S. in and about Balloon Street, Manchester. In one domestic prison—it was nothing else—I found one woman making shirts. She had six bedraggled children, half-clothed, half-fed, rarely ever clean, and never wearing a new garment. Her husband had deserted her. Many days she worked from very early morning till late at night, stitch, stitch, stitch all the time. And what do you think she earned in the week previous to the one I spoke to her in company with a lady social worker? Only 7s. I went into a lonely house at the end of a court. There were no curtains to the windows. It was a dark, wet afternoon. Sitting in the centre of the only living-room in the house was an elderly woman, making elastic bands and tassels for umbrellas. In this gloomy abode the woman, aged sixty-two, lived and worked alone, day after day and night after night. And for what? For 4s. 6d. to 5s. 6d. a week! She paid 3s. 6d. for the miserable, diminutive hut, the very sight of which ought not to be tolerated by any Christian nation. How did she live? Only in this way—that what society failed to give her for her incessant labour, charity came to the rescue. But why on earth should we permit a system of profit-making out of workers who could not be kept alive to perform the never-ending task, if charity did not step in? Was it ever intended that either charity or the Poor Law doles should have been distributed for the aid of employers? I could cite innumerable cases of sweated workers living, or existing, on the dual income of labour and public assistance. I have seen it in

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Manchester, Liverpool, London, Glasgow,* Belfast, Birmingham, Leeds, not to speak of smaller places. And I have been supplied with the names of employers, mostly living in an extravagant manner, and not infrequently dwelling in the beauty areas and health resorts of the kingdom. This condition of British industry is not only grossly unjust to the sweated, blood-sucked workers, but it is an imposition upon the public who have to provide what employers fail to do—that is, the barest necessities of life. Why should there be the slightest hesitation, therefore, in applying the Trade Boards Act?

I have in my possession ample evidence to indicate that the rates paid to these home-workers have, in many cases, declined, as public assistance and prices of food have been increased. I have watched women, assisted by their children, make up shirts at 8d. per dozen; and, whilst in pursuance of my facts, I have seen working-men trade unionists purchasing them. It is this kind of indifference to the welfare of their own lower classes that the workers themselves make it very difficult to raise the standard of life among such women as home shirt makers, earning 6s., 7s., and 8s. per week, for hours of labour to which no trade unionist would submit. And it is a mistake to assume that articles of labour manufactured in the way I have indicated are necessarily cheap goods. They are not. I have seen linen goods made up in the slums of Belfast for *less than one penny per hour*. I have been shown these goods in wholesale houses and retail establishments, marked at prices that could be paid only by the wealthy classes. And this burden of sweating falls chiefly upon girls and women—girls on the border of womanhood, and women who are mothers and grandmothers, women who have lamented the functions of motherhood because they interfered with their wearying labour and the earning of poverty wages. To say that we can do no more for these women than has been done heretofore is to admit that the civilising influence of social reform is hopeless as far as these denizens of the industrial gutter are concerned. But how and when are we going to remove the foul stain from the escutcheon of British industry? The time should be now, and the best weapon we have is the Trade Boards Act. It should be used unsparingly. And when we have achieved all we can by its operation we may then proceed to a still higher standard.

Now one of the objects of the Trade Boards Act is to set up a standard average wage for women workers of 13s. per week. If you will compare this standard with the average wages I have already enumerated in connection with organised factory labour, you will perceive that it is in some instances even higher; it is higher than the averages earned in several groups of trades where women are protected by trade unions, composed either of females only, or females and males. Indeed, the regulation of wages by

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legislation has accomplished more in regard to trades already under the Act than might have been won by other means in a generation almost. But this 13s. standard is still 2s. below what has been estimated by experts to be necessary for the maintenance of a single woman. And in every city, and in many large towns, there are thousands and thousands of women whose earnings are below the 13s. standard. Liverpool may be taken as a typical example. Not long ago the Rev. H. D. Roberts investigated the conditions of women workers in this great shipping city. He estimated that 100,000 females were employed in shops, factories, and warehouses. He was led to the conclusion that 50,000 of these earned less than 13s. per week. His figures were supported by the Liverpool Anti-Sweating League. As a contrast it may be remarked that the City of Liverpool Co-operative Society now pay the following scale of wages for females:—

Ages.....	14	15	16	17	18	19	20	21
Girls.....	5/-	7/-	9/-	11/-	13/-	15/-	17/-	20/-

The payment to manageresses of branch shops is 23s. per week, and if buyers as well 27s. per week.

Now contrast this with the wages of females investigated by Mr. Roberts. Female riveters at a tin-canister factory obtain an average of 5s. and 6s. per week. He gives instances of shop girls, aged eighteen years, working at pay-desks for 5s. a week. In a soap factory the average is 9s. In a confectionery business the average is from 8s. to 9s. Bottle washers get 6s. 6d. per week and work nine-and-a-half hours per day. Rope workers have an average of 9s. And so one could go on filling pages with the mere recital of miserable wages—all below the Trade Boards' standard. In a "most respectable wholesale concern" the wages are 8s. and 9s. a week for women from nineteen to twenty-six years of age. And mark this: women at this place, up to forty years of age, get no more than 9s. per week, and some of these *have put in twenty years' service*. Furthermore, for this each worker has to produce a testimonial from a Sunday school teacher, a clergyman, or a minister. Here you must go provided with Christian virtues and try to live on wages that send scores of women to the Hades of the prostitute. There are firms in Liverpool paying an average wage of 8s. 11d. to women whose ages average twenty-two years. I am not concerned with the industrial conditions of these women's employment, which, in too many instances, are bad enough in all conscience. I am not concerned at the moment with the temptations which a city of entertainment and luxury offers to those women. I could add, if I had the space, to Mr. Roberts' short list, a very long list of low-wage cases in Liverpool, which Miss Eleanor F. Rathbone, M.A. (a member of the Liverpool City Council) has been good enough to send to me. I have another list of Manchester, partly collected by myself. Pages

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could be filled with a bare tabulation of low wages in Birmingham, which I have extracted from the inquiries of Mr. Edward Cadbury, M. Cécile Matheson, and Mr. George Shann, M.A. In nearly all cases this long list cites occupations of women that mostly come below the Trade Boards' cardboard box standard of 13s. a week. The trades in which these women work are such as the making of ammunition, bedsteads, belts and buckles, brass buttons, bolts, chains, chandeliers, copper, cycles, electric fittings, enamelling, fenders, gas-fittings, guns, hair-curlers, hairpins, hinges, hooks, horse combs and clippers, lamps, metal plates, nails, needles, pens, pins, perambulators, rules, screws, spoons and forks, tacks, thimbles, toys, umbrellas, &c. The list extends into clothing and sewing trades, into food trades, jewellery, printing, stationery, leather, and about forty other groups. I have named the first groups, because they indicate the kind of useful work that women are doing. Except in a comparatively few cases the average wage of women over eighteen comes below the 13s. standard. The wages of women in the cycle trade average 10s. 6d. for workers over twenty-one years of age, of whom nearly 50 per cent. are married women earning 11s. weekly. Between seventeen and twenty-one the average wage is 9s. 2d.; below seventeen, 7s. 1d. My space is filling; and I must omit the statistics compiled by the Women's Industrial Council with relation to women's wages in Liverpool, and read before the Statistical Society in 1908. It is a record of sordid conditions and scandalous wages. I have also before me a dark picture of the conditions in the low-paid trades, principally, employing women in Belfast, Dublin, and the North of Ireland. Margaret H. Irwin, secretary of the Scottish Council for Women's Trade, has issued condensed particulars of women workers in Ireland. I have before me as I write 149 cases, with their black details, drawn from a variety of occupations, of which each group of cases is typical. Everywhere in England and Wales, in Ireland and in Scotland, come voluminous evidence of wages altogether incapable of keeping body and soul together. I am sorry I cannot stay to reproduce examples from Miss Irwin's inquiry, or from my own personal notes collected from the lips of Irish workers themselves. Wages of 4s., or 5s., or 6s., or 7s. are not at all uncommon in shirt making and linen embroidery, even in instances where not only long hours are needed, but a high degree of skill. The crimson facts have been endorsed by inquirers of every description, including lady factory inspectors, medical men, and medical officers of health. Proof is overwhelming, and the list of low-paid occupations for women seems almost inexhaustible. They form a depressing record. But what must their black details mean to those who have to bear them from day to day? They are connected with the manufacture of articles that are ever before us in our homes, used or worn by us all. Some of us, however, would nearly lose

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our senses if we or our children had to sink to the conditions and the slavery of those who make and finish them. A few years ago it seemed almost impossible to improve their circumstances, but that is much less so to-day. The nation has a weapon at its disposal. This is the Trade Boards Act, which we might all do something, by word or deed, to hasten in its extension. It is not pleasant to spend one's time in writing about these things; it is undoubtedly gloomy to read about them. But we may at least derive some enjoyment from the knowledge that we are engaged in a good work once apparently hopeless, but now made possible of achievement.

WIVES, MOTHERS, AND WIDOWS.

It is generally assumed that females are usually indifferent to their industrial outlook, because they are always looking forward to marriage. This is no reason why they should be persistently underpaid, although it is, no doubt, one of the principal causes of the economic plight in which so many females find themselves from day to day. In many respects females themselves are responsible for the freedom with which they are exploited. So long as they live in the hope of marriage, they pay, in consequence, less attention to reform, either in the direction of wages, hours of labour, or factory conditions. Why that should be so is astonishing. But it is so, and employers of labour reap the advantage of woman's indifference to industrial welfare. Females suffer in two ways. First of all, small earnings provide a less opportunity of making provision for marriage; secondly, a great number of women have to continue working even after marriage, and others have to return to factory labour on the death of their husbands. Women marry younger and live longer than men. Widows become proportionately considerable; Mr. B. L. Hutchins estimates that "something like one woman in every eight over twenty years' old is a widow."

At any rate, marriage in working-class life does not form the security against industrial employment as most people would assume. As a matter of fact, about one woman out of every four females industrially employed is either a widow or a married woman. In some trades the percentage is higher than that. However, the number of females occupied in England and Wales in 1911 was 4,830,734 (compared to 11,453,665 males). Of these females, 680,191 were married and 411,011 were widows—the total number of married and widowed women being 1,091,202. This amounts to nearly one-third of the total females occupied who are twenty years of age and over. The proportion is not so great in Scotland, where there were 593,210 girls and women occupied in 1911. Of this number 31,465 were married, this being 5·3 per cent. of the total. There were 44,063 widows, or 7·4 per cent. of those occupied. The age at which most females are

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occupied in industry is from twenty to twenty-five years. Up to forty-five years of age there are more females in employment than there are at any group of ages below twenty. In fact, the census of 1911 shows that there were more women returned as being occupied at the age of fifty-five than at any age below twenty. There is no limit to the occupational age of women. In 1911 there were 122,532 in England and Wales working for a living at sixty-five years of age and over. Hence, neither marriage nor womanhood, including motherhood, is a guarantee against females not having to enter the economic struggle in the factory, or in domestic service, or in the labour of outworkers and charwomen. There are 126,061 charwomen, of whom 37,441 are married and 61,720 are widows—that is, 99,161 married and widowed out of 126,061. Charwomen have increased from 111,841 in 1901, when 86,463 were married and widowed. In nearly all cases these women are driven to this occupation because they are dependent entirely upon their own earnings, or because they have themselves and others to maintain, or because their husbands are infirm, underpaid, or are the victims of vice. We may gather from the undergoing table a knowledge of the age groups at which females are employed as wage-earners:—

Ages.	Numbers.	Ages.	Numbers.
10.....	10,243	19.....	243,322
13.....	39,033	20.....	1,037,321
14.....	133,217	25.....	1,057,275
15.....	193,285	35.....	604,422
16.....	225,287	45.....	422,642
17.....	241,988	55.....	247,029
18.....	252,696	65 and over.....	122,532

Now these figures do not cover the total number of females of adult age who are dependent upon wage-earning employment at one time or another. Women are more irregularly employed than men; women, owing to their duties in life, are constantly falling out of employment for a period, and returning at a later stage. Hence, the range of figures from which industrial women is drawn is greater than is usually indicated by the census returns. We may safely assume, therefore, that there is much more necessity for young female workers fighting for improved conditions than is generally assumed. If marriage causes a break in their industrial employment, family economic causes compel a fair percentage of them to return. In some occupations the percentage of married and widowed women is always considerable. For instance, in the manufacture of china, earthenware, and porcelain goods there were 25·8 per cent. of the females married when returns were obtained in 1911. Among marriageable women the percentage must have been much greater, as the calculation was based upon females of all ages. In these trades the tendency has been for the number of married females to increase. Take an

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example. In 1901 there were 6,984 in the state of marriage and widowhood, and 8,795 in 1911. A special inquiry made by the Home Office in 1907 into the marriage state of women in all textile trades revealed the fact that there were 24 per cent. of women over eighteen years of age who were married, and 4 per cent. widows. In non-textile factories there were 16·3 per cent. married and 4·4 per cent. were widows. In the textile mills in all parts of the United Kingdom, but mainly within a comparatively small radius of Manchester, the married women and widows numbered about 142,000. It has been estimated that in the cotton trade alone about 33 per cent. of the females engaged in the various processes are married, or are widows. The total number of married women workers in Lancashire is 211,000.

Industry, under individualism, has displayed no chivalry towards women. Ever since the commencement of the factory system their industrial and domestic labours have continued to increase. Men, at least, have had the choice of freedom, either before or after the factory hours of the day. But this has been denied to females, and particularly those who are married, whether they have become mothers or evaded the duty of perpetuating the race. It is not necessary to quote figures or to carry on any academical investigation in proof of this, especially to anyone who has lived among it and witnessed its appalling results among the womanhood of our industrial populations. That it yields dire effects upon women, upon mothers, and upon families, the victims of this continuous strenuous life would, in too many cases, be the last to admit. But it is because they have become blind to their true conditions in comparison to what the life and environment of a mother and child should be. Raphael's "Madonna and Child" is often presented to us as a picture of motherhood and childhood to be imitated, with its suggestion of health, freedom, happiness, and the sacred task of motherhood. But how is this domestic picture to be at all realisable within the industrial cauldron of Lancashire, with so many mothers enslaved to mill conditions from early morning to evening, and afterwards enslaved for the night to every call of a working-class home? This human blot upon the wealthiest industrial county of the kingdom increases rather than decreases. And the burden of the married woman worker is part of the continuous strain that has been imposed upon her as a female throughout her youthhood. I have worked side by side with these women, and, on the other hand, I have since had ample opportunity of observing the girlhood and womanhood in grades of society presumably occupying a higher economic plane. But I have not the space to go into the details of the daily life of the married woman worker, with its never-ending demands upon her wasting strength. Nor is it necessary to try to prove anything in this respect by figures. One can rely upon experience and observation alone. The life of the married woman is hard and

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harsh, and not infrequently cruel, when compared with the lives of other women who live upon incomes largely derived from the labour of females in industry. And if I had facility for a substantial record of proof I could, by the mere use of scissors and paste, overload pages of this *Annual* with copious extracts from a heap of examples I have cut, from time to time, from the concrete reports of lady factory inspectors. These extracts relate to every industrial region of the United Kingdom, whether in connection with the manufacture of cotton in Lancashire, of woollen in Yorkshire, of linen in Ulster, of jute in Forfarshire, of pots in Staffordshire, of metal goods in Worcestershire, of tinplate in Glamorganshire. And so with other trades and other places. As I sit writing these lines I can see no less than ten females from sixteen to twenty years of age sitting or playing in the sunshine, gaining strength and beauty. If they were the daughters of working men and women they would be in the factory, or the forge, or the warehouse, wasting strength for the wealth of others. For if there are two things I have shown in this contribution it is the extent to which the daughters of working-class families are employed in industry, as youths and adults, and the extent to which they are inadequately paid, except in a comparatively few instances.

One cannot say that females must not work. It is the fashion in these days to advocate and demand an extension of female employment. The demand is just and necessary to the economic requirements of working-class and lower middle-class life; and honest work would not do the females of other classes any harm. And one could adduce numerous facts proving that where married women are employed in industry it is because they are compelled to do one of two things: they must either neglect the family or their dependents by going to the workshop, or by staying at home they must starve themselves and their children through having no weekly income. However, if married women have to undertake the triple task of wage-earner, child-bearer, and mother, then it should be the duty of society to see that their wages are just and their conditions of labour more compatible than they are to-day with a higher development of womanhood and motherhood. It is not at all uncommon to see in our great textile towns the women going to work in a morning earlier than the men employed in engineering works, and returning home later in the evening. And the industrial conditions of these women are more physically exhausting and strenuous. Yet you may see these women, especially the older ones, tramping wearily through the streets from the mills, long after the men have reached home. Is it fair? Is it sensible when we come to consider all things that are essential to the welfare of working-class society? I am not putting the case of the women from any mood of compassion. But it should be plain enough to the man in the street even that, so long as so many of these women have to drag themselves from the factory

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labour to equally hard labour at home, some consideration should be given to them that would tend to make their hours of labour at the mills less rather than more than the hours of men in mechanical occupations. This was suggested not long ago by one of the members of Parliament of a large manufacturing town—himself being a millowner—but the suggestion fell on dead ground. Even women reformers themselves paid no heed to it.

The question of women in industry raises many problems which scarcely come within the scope of this article to discuss; nor would my space be sufficient for the purpose. But of recent years there has been among women social workers a determination to exercise hostility against any interference with the industrial employment of married women. In view of the economic conditions of too many families there is much to be said for this opposition. But in some cases it has been carried too far, and has tended to check the desire to prevent the publication of truthful pictures of the reprehensible conditions of the employment of married women and the evils arising from it. There has been a fear that if too much is said and written about the disadvantages, attempts would be made to put an end to the factory engagements of married women. But the reliance upon females of all ages for the upkeep of British manufacturing industries has now gone too far for such a sweeping action to be enforced. Take the processes of the preparing, spinning, and weaving of cotton goods. If one were to prevent married women working at these occupations it would almost completely disorganise the cotton industry, reduce its present supremacy, and stifle its future progress. But that should not be permitted to stand in the way of any exposure of the objectionable conditions of these women's employment. Condemnation should be utilised to prepare and enforce improvements. If married women were turned away from the mills of Lancashire it would minimise female operatives to the extent of one-third of the total number. Unless they were replaced by males the industry would be partially ruined. Nevertheless, it has been contended of recent years that the employment of mothers in factories does not result in heavy infantile mortality and neglect of children that survive the first twelve months' existence. This attitude has been adopted in order to arrest any campaign for the abolition of the married woman as an industrial worker. But, whatever may be the slaughter of innocents in other counties, we are still face to face with the fact that Lancashire, which employs more married women in factories than any other area in the kingdom, has the greatest annual death-roll of babies. In a shaded map of infantile mortality recently issued by the Local Government Board the darkest spot was that of Lancashire. The next blackest patches were other industrial regions in England and Wales. And of twenty-five of the towns with the largest death-rates of children below the age of one year ten were in

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Lancashire, and six others in industrial towns near the borders of this over-strenuous industrial county. And one must add to this yearly list of dead children the number of miscarriages brought about through industrial employment. For proof of this read the reports of lady factory inspectors for the past few years. I have seen pregnant women in the pottery manufactories of Staffordshire climbing tables and ladders with heavy weights, and in that way endangering their own lives and the lives of their unborn children. The result is that miscarriage is not at all infrequent in these towns where china and earthenware goods are manufactured. Many a woman "with child," in industrial districts, has been advised to seek factory employment if she desired to get "rid of it." These are incontrovertible facts, which have been recently lessened not so much by an improvement in the actual factory conditions as by the beneficent effects of the maternity allowances in the National Insurance Act. But they still exist to an extent that should induce us never to tire of seeking advancement in two ways respecting the employment of females in industry:—(1) By increased wages to enable expectant mothers to secure rest and leisure when they most need them; (2) by special consideration being given to the usual working hours of women, and their industrial conditions. These achievements are not only essential to married women, but to all women during the age of potential motherhood—say, between the ages of fifteen and thirty-five. We know that, by the application of advanced sanitation, infantile mortality can be reduced. But, when all that has been done, in the districts in which women are mostly employed after marriage the child death-rate would remain the largest; the latest figures issued by the Local Government Board verify this, and they relate to the years from 1907 to 1910. In industrial towns the average deaths per thousand of those born were less than they had been at any time previously, since the industrial revolution had turned women from the fields or the domestic workshop. It is gratifying to observe this reduction; but the fact remains that by far the highest rates are always to be found in crowded industrial areas where women are numerous employed in factories. Burnley, the greatest cotton manufacturing town in Europe, has the most occupied women—and the highest infantile mortality in Great Britain!

SUGGESTED REMEDIES.

The one thing I am conscious of in the foregoing pages is the omission of numerous examples I might have given in proof of the audacious manner in which women have been economically exploited and made to serve the purpose of cheap labour. In view of the innumerableness of the facts this has been impossible. But from the statements I have made, and the figures I have reproduced from authoritative sources, it will be seen that the

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questions arising around the conditions of women workers form one of the gravest and one of the most pressing problems of the day. This is emphasised by the truth that there is a steadily growing determination to improve the circumstances of women workers concerning wages, hours of labour, respectful treatment, health, and sanitation. Generally, their plight at present can be only briefly described as degrading.

But in what way are remedies to be sought? Mainly, perhaps, by the adoption of methods similar to those which have been used by men—namely, trade union organisation and political action. At present, however, women lack both forces. They are most inadequately organised, and they have no political power through the ballot-box—that is, of a national character. There is another method by which the actual conditions of their labour can be improved; that is, by the supervision and influence of lady factory inspectors; but in this respect, as in others, they are insufficiently served. The present female inspectors perform their duties admirably; and only those who read their reports from year to year can have anything like a fair idea of the amount of good work they are constantly effecting. But they are not numerous enough.

Reverting to trade unionism, women's position is weak. They look forward to the marriage union rather than to trade unionism. One can hardly say why they should take this view in face of the vast numbers of adult women always in industrial employment. Perhaps they have never yet realised the greatness of this number, but still nurse the fond hope that female industrial employment ceases with marriage. But this is a delusion. Anyhow, if we take the latest returns concerning trade unionists issued by the Board of Trade, we shall see that at the end of 1913 there were 3,993,769 members of trade unions. Of this number there were only 356,763 females. This was an increase from 129,084 in 1904; so that, until quite recently, women in a sense were even not amenable to organisation. However, as the figures now stand, nearly three-quarters of them are females connected with textile trades, the textile membership being 258,732. A further look into the figures shows us that even in the textile trades 212,534, or 60 per cent., of the female trade unionists are employed in the cotton trade alone. Hence, of the total number of female trade unionists in the United Kingdom, amounting to 356,763, the cotton trade itself claims 212,534. Now this is significant; for in this centre of female trade unionism we get the best economic conditions and the most attention to labour considerations. If you will return to the tables I have given of women's wages you will perceive how far females in the cotton trade stand at the top. Their outstanding position is more pronounced to-day than it was at any period covered by my figures. Advances have been gained through trade union action. The wages of 16,000 ring

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spinners, for instance, have been granted increases of recent date varying from 1s. to 5s. per week. But another striking condition that accompanies the strong trade unionism of females in the cotton industry is that female cotton operatives are the only females employed in industrial occupations who are paid the same rates of wages as men are paid for the same class of work. Even in the sister woollen industry women do not enjoy this right. Hence, the remedy for women's wrongs through trade unionism is an effective one.

It is, perhaps, not the proper place here to suggest that the finest remedy for the wrongs of women workers would be a universal system of co-operative capital and labour. But there is much to be said in its favour. We have gained some idea from the foregoing pages of how women workers are treated, for instance, in establishments outside the co-operative movement. Co-operation, of course, has not yet attained immeasurable heights in this respect. There are, in fact, still some local co-operative societies, controlled even by trade unionists, that are as laggard as some of the worst private employers of labour in their economic treatment of their female servants. They are not performing their duty neither to the cause nor to their generation. But let us turn to the Co-operative Wholesale Society, which we may regard as the largest co-operative trading concern in the world. We may obtain from the treatment of women workers under the C.W.S. an example of what can be achieved by sound democratic action and control. To some extent I must apologise for occupying space with details of wages in the Co-operative Wholesale movement, because it may seem to many readers like carrying coals to Newcastle. But I want to state the co-operative case briefly to form a contrast with examples of wages I have tabulated concerning women outside. And it is essential that we should remember that the fixed minimum scale of wages regarding female workers under the C.W.S. is, in many cases, paid to a class of workers who, outside the co-operative movement, are included among those who are rewarded with the most abominably low wages I have quoted in this article. These females are to be found in the shirt-making trade, in the manufactory of jam, confectionery, tobacco, &c. And so on. We must remember that in many occupations females' earnings do not average more than 5s. to 7s. 6d. a week; yet for a similar class of work the C.W.S. apply their minimum scale.

What is this minimum scale to which the C.W.S. have been bound by the body politic of the members who constitute their shareholders (mostly working men and women), and which must be paid to females employed in any capacity whatever? It is as follows:

Age.....	14	15	16	17	18	19	20
Wage.....	5/-	7/-	9/-	11/-	13/-	15/-	17/-

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The Co-operative Wholesale Society are large employers. The number of females employed at the various works and departments is 7,350. These comprise 3,830 day-workers and 3,520 piece-workers. Regarding the position of wages, the following summarised account has been supplied:—

(a) *Female Employés other than Piece-workers.*

The whole of these are now receiving wages at *not less* than the Congress minimum scale of wages.

(b) *Piece-workers.*

The "log list" is now fixed on such a basis as will enable *at least 85 per cent.* to earn not less than the scale rate mentioned.

According to the last return prepared in connection with this matter, the number of females receiving wages *in excess* of the minimum scale rate was 2,950, the approximate amount being £18,000 per annum.

It may be mentioned that the health and comfort of all the workers have had the first consideration, as will be seen from the following, viz.:—

1. Good healthy workrooms.
2. Trade union wages in every case where trade unions exist.
3. Best wages in districts where no trade unions exist.
4. Short hours of labour (5,400 females working forty-eight hours or less per week).
5. Payment for time absent through sickness and holidays to those on fixed wages, and who are not paid for overtime.
6. Overalls provided for females in certain packing departments.
7. Commodious dining-rooms, with meals at reasonable prices.
8. Facilities for recreation and entertainment.
9. Annual picnic, with a grant for each employé attending.
10. Thrift fund, which is generously subsidised by the society.

Practically the wages and conditions that obtain in the English Co-operative Wholesale Society's works also obtain in the factories and workshops of the Scottish Co-operative Wholesale Society. It is quite true that many private employers are not unmindful of the provision of healthy conditions and good wages for their female employés. But, generally speaking, the circumstances of women in industry are not to be compared with those under the charge of the two great Co-operative Wholesale Societies. I will say no more about that here, except that I speak from a wide experience of women workers in the factories and workshops of the United Kingdom.

My task of trying to indicate the numerical growth of women in industry, and the ignominious rewards granted to females for industrial service, must now be drawn to a conclusion. The numerical advance will continue. Low wages must be increased.

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Doubtlessly, with the numerical development, fresh domestic problems and new social sentiments will arise. New legislation will be enforced by the organisation of women workers in trade union and political objects. But no matter whatever be woman's advance in industrial or professional directions, she must be also the child-bearer of the race, if the race is to be perpetuated. So far as the advance of woman has proceeded in wage-earning occupations, no specific attempt has yet been made to combine on anything like ideal lines her industrial conditions with the necessities associated with her maternal functions. In many cases she works harder and longer hours than men, and is invariably paid much less in wages. But, just as bad social, economic, and industrial circumstances of young men tend to render them less efficient as fathers, or soldiers, so the depressing conditions of female workers make them less proficient as mothers or bearers of the nation's children. Society itself reaps the soiled fruit of its own sowing. Heretofore, women in industry have been the victims of gross injustice and selfish profit-seeking. Our object, however, should not be to banish them from occupational positions, but to improve their industrial conditions and make these more compatible with the requirements of healthy womanhood, strong motherhood, noble citizenship. Our policy should be freedom of choice for both sexes, with such capital and labour conditions that would help to make that freedom a blessing rather than a danger to mankind.



Our National Wealth: The Conditions of its Continuance.

BY L. G. CHIOZZA MONEY, M.P.

I. OF THE THREE NATIONS WHO LEAD INDUSTRY.

OUR British State has reached in the second decade of the twentieth century a point in its development and in its relation to the world at large at which it will be well for its future if those responsible for its governance take stock of the national undertaking and weigh carefully the conditions which have raised Britain to her present position and the measures which are necessary to secure the material future of the British people. It is my purpose here to trace in broad outlines the circumstances which have made Britain what she is, and to show in their true perspective the factors which constitute our strength or our weakness. We shall be concerned with fundamental matters, some of which are within our control, while others, unfortunately, are quite beyond it. We shall see that, in one sense, it is as difficult for a nation to become wealthy by taking thought as for a man to add a cubit to his stature. Nevertheless, within the practical possibilities of human effort, we shall see that there is much that may be done and, indeed, much that must be done to safeguard the material welfare of the people of the British Isles and to fit them to remain the head and front of a great Empire.

Let us begin by observing that it is by no means a matter of chance that the people of the world, regarded as a whole, are to be found collected together in great groups in certain areas. In ancient days the distribution of the world's population was largely conditioned by the difficulties of locomotion. In modern times the railway and the steamship, combined with a growing knowledge of the world's surface, have made it possible for the people of the most advanced races to settle in naturally rich areas. In our day millions of people transplant themselves in the world in the course of a single year, and before the world is very much older claims will have been pegged out in all the world's choicest spots by enterprising emigrants. What is it, under these conditions, that decides the distribution of population in the world? The answer is that there are two great factors. The first is Fertility, and the second is Power. The great areas of virgin soil in the

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New World draw upon the teeming agricultural populations of old countries, and we see some poor peasant from Galicia or Tuscany taking up a free grant of land on the Western Prairie. More potent still as a factor in attracting and holding population is a country's natural gifts in point of power. These, when a country is fortunate enough to possess them, afford the means of creating wealth in enormous quantities and to support at a high standard of comfort great and prosperous populations. The fact that three countries of the world—two of them, the United Kingdom and the German Empire, old civilisations, and one, the United States of America, a "new" country—lead the world in point of wealth production is due to their possession in an extraordinary degree of the main source of the chief means of power production at present known to mankind, viz., Coal. By virtue of their magnificent coal-mines these three nations are able to manufacture upon a large scale under the most favourable conditions. Other nations are handicapped in competition by their inferior resources, and have, indeed, in respect of many great industries, no chance to compete on level terms with the three industrial leaders.

To realise the extraordinary predominance in coal production of the three countries named, let us consider the world's coal output in 1912, the latest year for which we have particulars available for all countries. Here are the curious and significant facts of the case:—

THE WORLD'S COAL PRODUCTION IN 1912.

(The figures include the inferior brown coal known as lignite.)

	Tons.
United States	477,000,000
United Kingdom	260,000,000
Germany	253,000,000
	990,000,000
All the rest of the World	210,000,000
All the World	1,200,000,000

Nature, it will be seen, has been anything but impartial in her distribution of a most important world asset. With all the world producing, in 1912, 1,200,000,000 tons of coal, we see that America, Britain, and Germany produced between them 990,000,000 tons, or over 82 per cent. of the whole. To put it more simply still, the three great coal nations produced between them more than eight out of every ten tons of coal produced in all the world. It is impossible to argue with facts like that; they are too hard to be resisted by the nations who have not the fortune

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to be great coal countries. In trades demanding the use of large quantities of cheap power it is impossible for France to contend with England, or for Holland or Italy to contend with Germany.

II. THE RISE OF BRITAIN AS AN INDUSTRIAL POWER.

The rise of Britain to eminence in industry and trade was the result of the discovery by a few gifted men of the means to utilise coal power. It is indeed strange that for so many centuries coal had remained for practical purposes unused in these islands, and that not until the eighteenth century did anyone take sufficient thought upon the extraordinary heat-producing qualities of coal and the common and visible phenomenon of the boiling of water. The world had to wait so long for thoughtful men to consider these things that it might easily have had to wait a century or two longer. It is a curious thought that we owe to a few persons the facile printing of these words by power machinery in 1914. When the very obvious powers of heat and steam at last thrust themselves upon the thinker, Britain was enabled to make use of the wealth which she had all along possessed during long centuries of poverty.

We hardly realise to-day how short a remove separates us from the poor Britain with a stagnant population. The year 1750 was only one hundred and sixty-five years ago, or, as nearly as possible, five generations—the days of our grandfathers' great-grandfathers. In 1750 all England and Wales, which now contains over thirty-six million people, had a population of little more than six millions, while what is now the United Kingdom, with a population of about forty-six millions of people, contained about ten-and-a-half millions of people. And not only was the Britain of five generations ago poor in point of numbers; the almost stagnant population lived at a very low standard of life, and the main occupation of the people was a poor agriculture. Industries were few and unprogressive. A big iron industry was impossible, for we had no timber left with which to smelt iron, and the little iron produced in the world was naturally produced in the North of Europe, where there was plenty of good timber to make charcoal. We could in no better way illustrate the poverty of the world as a whole at that day, and the comparative poverty of Britain in that poor world, than by pointing out that in the middle of the eighteenth century the entire world produced about one hundred thousand tons of iron and that England contributed about fifteen thousand tons to that very poor total. Iron is man's chief tool, and when the world had very little iron it was necessarily poor. The chief English industry in the middle of the eighteenth century was the woollen trade, but it was a poor thing at the best, and the English manufacturers had to send their cloths to the Continent to be dyed and finished for lack of the knowledge and skill which existed elsewhere.

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When coal was made to yield its power, and we discovered how to get it in great quantities and to use it to advantage, the currents of British endeavour were almost completely changed. In 1750 Abraham Darby discovered how to smelt iron with coal, and that fact changed Britain from one of the least of the iron countries to one of the greatest, giving her a lead in the iron manufacture which she was destined to hold for many years. In the same year James Watt began his wonderful work with the steam engine. When coal power was realised, and when plentiful quantities of iron came to be produced cheaply, invention was given a great impetus. The age of machinery was ushered in, and production by power began. Towards the end of the eighteenth century the factory system was established. The country which at the middle of the eighteenth century had had for several generations an almost stagnant population began to increase by leaps and bounds. Between 1700 and 1750 the population of England and Wales grew by no more than about 500,000 people; in the next fifty years the population increased by about 50 per cent., numbering about nine millions in 1801. We may regard the middle of the eighteenth century as a turning-point in British progress. Before that date Britain was an agricultural country largely exporting food and materials and importing manufactures. After that date Britain began to draw upon the world for materials to work with the great sources of power which she possessed in her coal-mines, and where before she had imported manufactures she began to export and to build up a great foreign trade in the products of her new coal-based industries.

III. HOW OUR FORTY-SIX MILLION PEOPLE LIVE.

Production by power, which, as we have seen, began in the eighteenth century, made rapid progress in the nineteenth century. Whereas in 1801 the total population of the United Kingdom was 15,500,000, one-half of that number having been added in the last fifty years of the eighteenth century, at the end of the nineteenth century the British Isles had a population of over forty-one millions, a figure which has now risen to over forty-six millions. The same isles, which so recently found it difficult to sustain a small population even upon terms of an almost universal poverty, are now the home of a population so great that it scarcely notices the sailing of hundreds of thousands of emigrants in a single year. It is very important that we should clearly understand the economy which sustains so great a population in so small an area. The conditions of our existence are exceedingly complex, and it is not difficult, therefore, for a man in our modern days to be a cog in the great machine without understanding either his own position or that of the great working machine of which he forms an insignificant part.

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The United Kingdom is naturally a poor country save in respect of the gifts of its people, its geographical position, and its extraordinarily good stores of mineral fuel. We may sum up our first-class material possessions in two words—Coal and Seaboard. If we consider the materials with which our work is done we realise how true is this broad generalisation. Whether we regard metals, or timber, or textile materials, or hides and skins, or such miscellaneous materials as rubber and asbestos, we find that our native supplies are either inferior or altogether lacking. As to native metals, only iron and tin are of any consequence; of such important metals as copper, lead, and zinc we have negligible supplies. As to timber, it is our own fault that we have not good native supplies, and the nation vainly waits for an enterprising Government to establish the great State forests we ought to have. As to many materials, such as cotton, jute, rubber, &c., we are altogether dependent upon oversea supplies, while as to wool, hides, skins, and many other things, it is quite impossible for us to raise in these islands more than a small part of the enormous quantities required to maintain the manufacturing industries which are based upon them. Our natural poverty in industrial materials has to be atoned for by doing work to earn supplies of them from abroad. Hence our great export trade. We manufacture for the export market, and earn in exchange for the manufactured products we send out the foods and materials which we do not, or cannot, produce at home. As to food, be it observed, we raise at home about one-half of our consumption of the kinds of food which can be raised in our climate; the other half we earn by our export trade.

But let the conditions of the successful conduct of this national economy be carefully observed. We are able to prosecute successful manufacturing because we have in our little Britain magnificent stores of fuel which in no case are situate more than about one hundred miles from the sea, and are often actually adjacent to tide water. Good coal thus situated means Cheap Power, and Cheap Power means the command of raw materials.

A good coal-mine well situated acts upon industries like a magnet. Raw materials are drawn to the coal, because near the coal they can be most successfully worked upon. Coal is so heavy and bulky that its carriage is a very costly matter, and it does not pay, in the general case, to take coal to materials as well as it pays to take materials to coal. It will be understood, therefore, what a peculiar advantage it is to a nation to possess such good coal as ours, and especially to have that coal not far from good ports, so that raw materials can be brought from any port of the world just to the place where they can be best used.

Now we have the British economy in a nutshell. With cheap, well-situated coal as a base, large-scale manufacturing is

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successfully conducted chiefly upon foreign materials. With part of the manufactures produced the imports are paid for without which we could not exist in these islands as a great people.

It should also be observed that British shipping, as well as British manufacturing industry, owes its present position to the coal asset. If we consider the kinds of goods we bring in, and compare them with the kinds of goods we send out, we see that the foods and raw materials which we have to import are bulky or heavy or both, whereas the goods we send out are chiefly manufactured articles, which, pound's worth for pound's worth, take up much less room in a ship than foods or raw materials. It follows, therefore, that, so far as our imports of food and materials on the one hand and our exports of manufactured goods on the other hand are concerned, we need many ships for our imports and fewer ships for our exports. That is awkward for shipping, because it means full cargoes inwards and many ships compelled to go out in ballast for lack of a cargo. Fortunately for British shipping, our coal redresses the balance, coal exports furnishing a heavy and bulky outward cargo, which compensates the shipowner. As coal exports have been increasingly needed with the growth of steamships to maintain coaling stations abroad, the coal export trade, by furnishing good outward cargoes, has helped to build up British shipping and make it profitable.

It will be understood, then, how all-important to the United Kingdom is its coal supply, and if we desire to understand what the loss of coal would mean to Britain we have only to turn to those parts of the United Kingdom which lack coal, such as Ireland, or such English counties as Norfolk or Oxfordshire or Wiltshire. These coal-less parts of the country we find to be poor and with an inferior standard of wages. So true it is that in our modern days a district without a power supply is sorely handicapped in the production of wealth.

Without the magic influence of our wonderful natural power stores it would be impossible for forty-six millions of people to live in these islands except upon conditions of great poverty. It is upon manufacturing and the commerce arising out of it that the majority of our people live, and if the secret of coal had not been discovered, or if our power supply had been as poor as that of France, there would not be twenty millions of people living in these islands at the present time.

IV. THE RISE OF FOREIGN COMPETITION.

In the early years of British coal development we had things all our own way. As has been pointed out above, there are only two other white countries in the world which possess coal resources comparable with our own, but neither of these countries was in

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a position to utilise their power in the early days when we began to smelt iron with coal and to use steam-driven machinery.

The United States, of course, lacked population, and it was not until 1860 that the United States, which will soon have one hundred millions of people, had a population of thirty-one millions. Iron was not smelted with coal in the United States until 1840, or *ninety years after* Abraham Darby successfully performed the feat in England. The ultimate destiny of the United States was well understood by competent observers two generations ago. The American coal is infinitely superior to our own, or, indeed, to that of any other country in the world, and it was certain, therefore, that as soon as she had sufficient population she would be able to surpass us easily in production. That has proved to be the case, and at the present time America produces in a year about three times as much iron as is produced in the United Kingdom. America, however, has not become a great exporter of manufactures. There are two reasons for this. The first is that she has gained people so rapidly through the two factors which we have seen to be the determinants of population—fertility and power—that she has been engaged in building up within her own borders the material framework of a great new civilisation. Most of the goods she has produced have been needed by her own rapidly multiplying people. She has herself many of the raw materials which we have to import. She is the greatest iron country, the greatest lead country, the greatest oil country, the greatest copper country in the world. She needs imports, but she has not the imperative need of Britain. Also, she has practised a restrictive commercial policy which has prevented her in obtaining a great hold upon foreign markets. She will, however, be a much greater competitor in the future.

As to Germany, we have but to remind ourselves of her history to understand why it was that her gifted people were doing so little during the early period of British industrial development. While Britain, the island power, protected from invasion by her Navy, was undergoing the industrial revolution and busily building up industries and wealth to sustain a greatly increased population, Germany was not merely divided but was, during a long period of years, a theatre of war. Her people, under their many rulers, were often politically divided, and until quite recent years commercially divided by hostile tariffs, different systems of coinage and of weights and measures. It was not until the formation of the German Empire, under the leadership of the Prussian King as German Kaiser, that Germany, less than forty-five years ago, won the peaceful internal conditions which enabled her to apply her great gifts to her fine resources. When at last she was free to devote her energies to the arts of peace, coal power soon did for Germany what at an earlier period it

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did for Britain. It built up fine industries which, backed by education and scientific research, have carried Germany with incredible swiftness to the position of the second export manufacturing country.

Neither America nor Germany could have done so much without the aid of the natural resources which have been the secret of our own success in modern times. If we again turn to the remarkable figures as to the world's coal output given on a previous page, we understand that, while it needed intelligence and skill to develop natural resources, each of the three leading industrial nations owes its position to the great and peculiar advantage of a magnificent coal supply. By taking thought a nation can add to the physical well-being and to the culture of its people, but it cannot add a single ounce to its native stores of minerals. Skill and intelligence are needed to make the most of any country, but that cannot atone for lack of natural resources; indeed, the recorded history of the world shows that where skill and intelligence are possessed by any race that race migrates in search of the best natural resources that it knows of in the world. The building up of a nation of nearly one hundred millions of people in the United States is a major illustration of the fact. The great American people is a heterogeneous collection of enterprising persons of all races (or the descendants of these) who have had the courage to leave their native lands in search of the virgin fertility and the power afforded by cheap fuel. Always in comparing nation with nation we ought to remember the profound principles of which I have spoken, and yet how often they are completely neglected.

V. BRITISH WEALTH AS IT IS.

By reason of the economy we have considered in broad outline the great British population has accumulated capital roundly estimated to be worth about sixteen thousand million pounds (£16,000,000,000), and enjoys an annual income of not less than two thousand one hundred million pounds (£2,100,000,000). These figures appear enormous when thus written down on paper, but let it not be forgotten that they refer to over forty-six millions of people.

Even the smallest affairs of a great people bulk largely in the aggregate, and we shall do well not to allow ourselves to be dazzled by hundreds or thousands of millions when we are considering tens of millions of people. It needs an enormous amount of food in the aggregate to supply even a starvation diet to forty-six millions of men, women, and children; it needs an enormous amount of capital in the aggregate to house them ever so poorly; it needs an enormous income in the aggregate merely to provide them with the barest comforts. If we want to view

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the facts I have given in a proper perspective let us consider our national income of about £2,100,000,000 for what it is as the aggregate year's fund of these people for all purposes, *i.e.*, for maintaining the central and local governments, for repairing and renewing old capital, for adding new capital, and for current consumption. When we divide £2,100,000,000 by forty-six million people, we see that it works out at about £45 per head, or about £225 per family of five persons. And that £225 average per family is not, as I have remarked, available for current consumption; it has to furnish national and civic needs, repair old capital, and supply new capital. Our national peace expenditure (less the Post Office outgo which is not really expenditure) is now (1914), in round figures, £180,000,000, while local expenditure out of rates is about £80,000,000. If we suppose no more than £340,000,000 to be saved for capital purposes in a year we have £600,000,000 to deduct from the £2,100,000,000 to arrive at the yearly sum available for personal expenditure, reducing the £2,100,000,000 to £1,500,000,000, or less than £33 per head. That being the average per head, need we wonder, in view of the bad and inequitable distribution of what income there is, that there is so much poverty in our midst?

As a matter of fact, the national income of £2,100,000,000 is so inequitably distributed that about one-half of it has to serve the needs of forty million people, while the other half is taken, approximately, by the remaining six million people. We may sum up the facts as to income by saying that the national income is surprisingly small in view of the powers of production conferred upon us by modern science and invention, and that what income there is very badly distributed.

Let us turn to the national capital, which we have said is approximately £16,000,000,000. Much of this (about one-fourth of the whole) is invested in British possessions and foreign countries, producing income for the well-to-do persons who own it. The remainder (about £12,000,000,000) represents the commercial valuation of British land, and all our farms, mines, quarries, railways, canals, tramways, docks, harbours, warehouses, offices, houses, shops, roads, sewers, lighting systems, Government buildings, stores, military and naval plant and material, telegraphs, telephones, &c. Apart from land value, we may perhaps put the British capital employed within the British Isles at something less than £10,000,000,000. What does that amount to for forty-six millions of people? To about £200 per head, or to about £1,000 for each British family.

Again we are struck, not with the magnitude, but with the paucity of the figure. It is astonishing that, after all these years of manufacturing by power and of producing wealth with the aid of scientific appliances, the British capital employed at home for each British family, including every sort and kind of capital,

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should amount to no more than about £1,000. In these days it takes £1,000 to build thoroughly well a small comfortable house. What a flood of light this single consideration throws upon wealth as it is. How clearly it appears that we have not very much to be proud of in what we have so far accomplished. There ought to be far more capital employed in our country, and an enormous addition is needed merely for one purpose, and one purpose alone—the housing of our people in beautiful and comfortable dwellings.

The ancient and proper meaning of wealth is well-being. If we rate British wealth in relation to that true and proper meaning, how much we have to deplore. Our cities are, for the most part, collections of ugly, uncomfortable, and crowded buildings, which rob their inmates of health, while they deprive them of the proper enjoyment of some of those things in life which are best worth having and which are not to be bought for any price whatever. If we walk in the streets of our great towns, and examine the contents of the shops, we realise that for the most part our manufacturing activities are directed to turning out knowingly rubbish for the consumption of persons who cannot afford to pay for well-made articles to which good material has been devoted. If we observe streets in their work-a-day aspect we realise that the majority of our people are ill-clad, and that no small proportion of them bear visible traces of physical deterioration. If we listen to the accents of the children we realise that an enormous proportion of them have not even been given the opportunity to learn to speak properly their own beautiful language.

There is, of course, an intimate connection between wealth in the corrupted sense of material property and wealth in the true sense of well-being. But it is a curious fact that the blind pursuit of wealth regardless of well-being has its own punishment, not only in the loss of the latter, but even in the loss of the power to produce material things. It was the failure of Britain in the late eighteenth century and in the nineteenth century to understand this truth which gave us the physical deterioration of our day, and stultified wealth production so successfully that we have attained to no more than the poor product which we have examined. Because the pursuers of wealth in our manufacturing centres forgot that the lives they employed to produce goods were the true wealth of the nation, our cities arose in ugliness and squalour, those who built and controlled them having no conception of the fact that they were sacrificing the chief form of property that mattered. There would have been no difficulty in building up beautiful and healthy cities instead of ugly and unhealthy ones, and if the proper course had been taken the beauty and healthiness would have reacted upon the mass of the people, and to-day the stature, the physical powers, and the aptitude for labour of the people would be enormously greater, and their output of material wealth enormously more than it is now.

VI. THE COMPARATIVE FAILURE OF PRODUCTION.

If we relate production as it is to production as it was before manufacturing by power arose, then we get an exaggerated view of modern accomplishment. The world of 1750 had little or no iron to work with. When all the nations had between them a ridiculous 100,000 tons of iron with which to work, how could wealth production be expected? The conditions of to-day must be judged and weighed, not by comparing them with the days when modern science had not arisen; they must be judged in relation to the powers we possess. It is as idle to compare production now with production in 1750 as to excuse the poor product of an adult and healthy man by pointing out that it is very much greater than that of an infant. Our modern civilisation must be judged by reference to the magnificent equipment of great and fruitful ideas which have been placed at its disposal by its clever men.

To-day the production of wealth by methods unprotected by patents and open to everyone to use has become a mere matter of simple routine. The production of material commodities of all kinds by clever machines and appliances is little more than child's play. "All can grow the flowers now, for all have got the seed." Why, then, are there not more flowers? What stands in the way of a full and adequate production of houses and furnishings, of clothes and boots, of instruments of sport and pleasure, of books and pictures—of the thousand and one things which go to the equipment of a cultured existence? That is the supremely important question which every intelligent person should ponder.

If we inquire into the application of inventions it is not difficult to find an answer to the question that has been propounded. We find at every point that known processes and inventions are either partly applied or ill applied. We find that, although wood-working machinery has been brought to such beauty of perfection, it is quite an easy thing to construct sound and beautiful furniture cheaply. The greater part of the small amount of furniture actually produced is sheer rubbish, known to be rubbish by the people who make it. We find that, while weaving machinery is as wonderful and as perfect as wood-working machinery, a large proportion of looms in the woollen and worsted trades are deliberately and knowingly applied to the production of inferior and shoddy goods, one-eighth of the material used in the British woollen and worsted industries being shoddy. We find that, while the making of boots merely consists of the running of a number of clever machines to produce the various parts at an astonishingly rapid rate, it is only the minority of the people of our country who are supplied with decent footwear made out of good material. No matter at what point we examine production as it is, we find an astounding and deplorable contrast between,

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on the one hand, what are beautiful and wonderfully clever and rapid and simple methods of production, and, on the other hand, a poor, attenuated, and rubbishy product. It is not the machines that are at fault; it is the misuse of the machines by commerce as it is. And can we be surprised that it is so? How is production managed, controlled, ordered? How do people find themselves engaged in it at this moment? There is no proper control or organisation. The entire mass of output is the product of chance, qualified by the pursuit of individual gain. No one sets out to make clothes for the British people. No one embarks upon the enterprise of making boots for the British people. No one orders or directs these or any other similar functions. As to the masters, here or there some individual thinks he perceives an opening for gain, and follows that opening blindly with necessarily imperfect information. He has to proceed in competition with other persons no better informed than himself, and whose object is the same as his object, which is not to produce the best goods to serve the best purpose, but to make as much profit for himself individually as he possibly can. It is mere chance whether, at any given moment, an opportunity is taken up. The class which supplies more or less enterprising units of partial and imperfect command is notoriously badly educated in commercial and industrial method, the nation being content to leave such matters as much to chance as it leaves the ordering and control of the great ideas which might be its fairest and most fruitful inheritance.

Or turn to the unit of industry, the humble private in the ranks. How does he enter the game? The answer is that he is not even dealt a single card. He sits at the table of Chance blindfold. He is trained to be at the mercy of the world into which he has to enter, as a rule, at thirteen years of age, when he is only just entering upon that period of physiological and psychological development which makes true education possible. Uninstructed and helpless, he passes out from the elementary school to enter humbly some industry or occupation. If he is a child in London or one of the many residential towns of our country his case is parlous indeed, for there are few real industries in them in which he can even be a useful cog. In such places we see him becoming not even a blind instrument in the use of splendid ideas, but a mere shopboy, or door opener, or billiard marker, or vanboy—a unit which may become at the best a shop assistant, or unskilled labourer, or lift attendant, or ticket puncher, or carman, or something of that kind, and which at the worst develops into a hanger-on, a loafer, a loungee at street corners. If, more happily, the child is born in a mining village, a cotton city, a pottery town, a hardware centre, a boot town, then at thirteen years of age, or even at twelve as a half-timer, he naturally follows the footsteps of his father and passes into the local industry if there is room for him, with the glorious prospect

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of working in a single groove while he retains health and the power to work, and while employment is good. How do the great ideas and inventions appeal to him? What chance has he to take part in the direction or the use of the wonderful ideas, some little phases of which are commonplace of his life? What chance has a boy in a boot factory to think of boot-making as a wonderful art, and of how it might be exercised to make good boots for a big population? In the ordinary case the worker in the modern factory has work presented to him as a dull and deadening routine. Work which is so necessary, and which might be so noble, comes to be regarded not as a part of life, but as a subtraction from life. While a man works, that is not Life—that is something to be tolerated until the siren announces the moment of cessation. Whoever else is to blame, we cannot blame the unenlightened unit of industry for the poor products of labour in our time. The average working man is merely clay in the hands of the potter. He is given work to do, and he does it. It is not his to reason why. Let us imagine, if we can, what would become of the working man who asked intelligent questions as to what he was doing—as to either its propriety, its usefulness, or its timeliness. The average working man is lucky to get work, and he knows it. If he as much as dreamed of questioning the conduct of industry, or the quality of the materials given him, or the commercial methods of his firm, I shudder to think what would become of his wife and family.

The remarkable records of the census of production, conducted in the year 1907, show clearly in detail the poverty of production which results from our poor use of science. The factory value of the entire produce of our mines, quarries, mills, factories, and workshops, apart from the value of the materials employed by them, is roundly £712,000,000. (The products are sold for much more, because of the fictitious values added by our wasteful and clumsy distributive system.) The census of production is nothing short of an indictment of competitive industry.

VII. THE WASTE OF LABOUR.

The tremendous fact which is brought out by the census of production is that of our working population a curiously small proportion is engaged in the direct production of material commodities. The misdirection of labour is so great that the work, not of thousands or of hundreds of thousands, but of millions, is poured out in waste as though water were spilled upon sand.

In the United Kingdom at this moment we have about twenty million men, women, boys, and girls who are engaged in what the census calls "occupations for gain." That is to say, they are either really or nominally earning their livings for remuneration large or small. How many of these twenty million persons are

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employed by our mines, quarries, mills, factories, and workshops? Here is the answer derived from (1) the compulsory census of production (1907), and (2) the voluntary census of agriculture conducted by the Board of Agriculture in 1908:—

BRITISH PRODUCERS (DIRECT PRODUCERS OF MATERIAL COMMODITIES),
1907-8.

Persons employed in industry, and included in schedules	7,000,000
Persons not included in schedules	1,000,000
Persons employed in agriculture, including farmers	2,500,000
Total	10,500,000

We see therefore that, broadly speaking, only about one-half of those who work for gain in this country are engaged in making or producing things. It is a fact which is as astonishing as it is significant.

Let it not be supposed that these producers are adults. As far as the seven million persons included in the first item of the above table are concerned, we are able to give an official analysis, and here it is:—

UNITED KINGDOM INDUSTRIAL EMPLOYMENT, 1907.

Wage-earners:

Males, aged 18 years and upward	4,250,000
Females, aged 18 years and upward	1,200,000
Boys and Girls under 18	950,000
Outworkers, chiefly Women	100,000

6,500,000

Salaried Persons	500,000
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Total 7,000,000

It will be seen that, if we term a “man” a male person aged eighteen years and upwards, there were in 1907 only 4,250,000 men wage-earners included in the seven million industrial workers. That means, of course, that the number of men aged twenty-one years and upwards was far short of *four* millions. The more this fact is pondered the more astonishing it appears. How many men are there aged twenty-one years and upwards in the United Kingdom at this hour? The answer is, in round figures, *twelve* millions.

Therefore, out of twelve millions of grown men in this country there are less than four million employed in the direct production of either minerals or manufactures.

Of course, we must not lose sight of the fact that distribution is necessary and important, and that we have not only to make goods, but to carry materials and goods on railways and to store

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them, and to sell them. Further, we have to remember that a certain number of men must necessarily be employed in teaching, in carrying letters, and so forth. Nevertheless, when every reasonable allowance is made for these things, it remains a thing most significant and remarkable that so few of our men should be engaged in actually making things. Think of the position. There are over forty-six million men, women, and children in this country. To produce minerals for all of them, and to make goods for all of them, employs less than four million grown men, aided, as the foregoing table shows, by a certain number of women, youths, boys, and girls. Can we wonder, then, that the production of material commodities is so inadequate? Is it surprising that the clever ideas and the clever machines produce so little?

The fact is that, as science and invention have furnished us with industrial processes and machines capable of turning out goods with great facility, we have released a larger proportion of our population from real work. An army of people in our country at this moment is engaged in work that need not be done, so that the work that ought to be done remains unaccomplished. That is a true and broad generalisation which goes to the root of the problem of poverty in our midst. Let us see quite clearly, and not shirk the facts of the case. We have either to get a better production of wealth and a better distribution of the products of that production, or we must be content for an enormous proportion of our population to lack the commodities which we have the actual means to produce.

It matters everything to a nation that its people should be not only employed, but well employed. Whether twenty million persons engaged in occupations for gain are doing well or doing ill depends upon the nature of the work they are doing. The fact of the matter is that instead of one-half of them being engaged in direct production, fully three-quarters of them, if not more, ought to be so engaged. That would mean that if we had fifteen million direct producers, and if, further, the work of those fifteen million direct producers was well organised and directed to produce things, then the production of material wealth in our country might easily be many times as great as it is now. Not only have we too few people engaged in production; the work of a considerable proportion even of these is wasted, for many of them are turning out stuff which had better not be made at all, while of those who are making useful goods a considerable proportion of their work is employed in connection with obsolete and inefficient machinery and plant. For my own part, I think it an understatement of facts to say that if the work of our twenty million persons nominally engaged in occupations were properly organised and directed to the best ends, aided by the best known processes and the finest machinery, the production of wealth in our country would be ten

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times as great as it is to-day. In short, the proper co-operative organisation of work would not only abolish poverty in its common sense, but give us such a degree of general comfort as is now not even possessed by what we call our well-to-do people.

For what is it to be "well-to-do"? Is a man rich when he cannot go abroad in his expensive motor car without having his senses assaulted by scenes of deplorable and sordid poverty and destitution? Your alleged rich man of to-day cannot even go to a public railway station without witnessing scenes which, if he possesses sensibility at all, must deprive him of happiness. The approaches to most of our great railway termini are sordid in the extreme, and no money can buy for the richest man amongst us the avoidance of them. In the real sense there is not one well-to-do man in Britain to-day, for no one can avoid being part of, and partaker in, the general muddle. Within the private precincts of some great park a millionaire may for a time forget the world of which he is a unit, but he may not emerge from his estate without quickly coming into contact with the sorry scheme of things in which, while he is a favoured mortal, he must take his share of unnecessary disorder and pain.

Let me by a single illustration carry this conception a little further. Take the matter of our railway termini. So poverty-stricken in the real sense are our arrangements, so lacking in common-sense and so wasteful of labour, that, whether we are nominally rich or nominally poor, we cannot journey from railway to railway in any of our towns without being really and actually impoverished through the waste of our time and convenience, which means the waste of precious moments of our lives. Whether the town be London or Manchester or Liverpool, if we desire to pass from terminus to terminus we find obstacles placed in our way as though they had been calculated. Often hours have to be wasted through the gross stupidity of the disconnections. We are bundled out at one terminus with our luggage, and, if we can afford it, we are taken through the town in a usually dirty cab to the other terminus, to wait a longer or shorter time for a train connection which ought to have been arranged to fit, but is not so arranged. The rich man is as poor in this connection as the poorest man, save that he can hire the dirty cab, whereas the poor man must walk. Lest it be thought that I have exaggerated in this connection, let me quote what was said by the chairman of a great railway company on this very subject a few years ago. Speaking to the shareholders on December 20th, 1907, Lord Allerton said:—

You can hardly conceive the disadvantages that exist by two unnecessary and separate train services, not always taking the shortest road, not always making connection at a particular junction so that trains may meet, and very often making the arrangements such that they shall not meet. I know, as a matter of fact, that this is the case.

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But let it not be thought that such deliberate manufacturing of poverty is confined to railways. On the contrary, our railways, clumsily as they are arranged, are shining examples of order as compared with the services we get in connection with business in general. At every point labour is misdirected and wasted through lack of co-operation and co-ordination. Workers are condemned to work hard in exhausting occupations, only to have their labour rendered fruitless by lack of co-operation.

VIII. CO-OPERATION AND CONSERVATION.

We have seen that what wealth we enjoy in these our modern days has arisen chiefly through our exceptional possession of some of the best coal in the world. Our fuel forms an asset which gives us an exceptional advantage as compared with all but two of the other white nations. When one has such an exceptional advantage one can afford to do many foolish things and yet possess more wealth than those who have not great coal-mines beneath their feet. Let us not delude ourselves, however, into the belief that coal is an impregnable rock which will for ever avail us. I well remember not long ago being in a small Midland town which had lost a considerable part of its population. Why had the population diminished? Because the coal-mines there had reached the limit of paying output, and, as a consequence, miners had had to drift away to other places. Slowly but surely that will be the fate of mining village after mining village. Within fifty years, within the lifetime of many people now living, the cream of the magnificent coalfields of South Wales will have disappeared. Within one hundred years we shall be working coal very much dearer and more difficult to get than that which is now being produced from our mines. That will mean that it will be more and more costly to get coal, and that, consequently, the cost of production will rise. Some people think that it is a mere matter of how long the coal will last. The real point is that the cost of producing coal will rise greatly long before exhaustion is reached, and as the cost of production rises we shall lose more and more of our special advantage as compared with countries which have now little or no coal.

And that is not all. The great feature of our time is the rapid scientific advance. Long before one hundred or even fifty years have passed coal may be rendered obsolete by the discovery of a great source of power. It is most improbable that that new source of power will be peculiarly advantageous to us as coal is peculiarly advantageous, and such a discovery, therefore, would mean probably level terms in industry and the destruction of the extraordinary advantage we now possess.

The moral of the story is, therefore, that whether coal lasts for a long period or for a short period, we must regard it as a

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matter of profound importance to prepare our people and our institutions in the present for a time to come when we shall have to do without the special advantage we now enjoy.

This duty of preparation would be incumbent upon us in any case, and if we could always rely upon our great asset it would surely still be necessary to make the most of it. As, however, we cannot help but know that our present position is transitory, it becomes, from a national point of view, a matter of the utmost importance to conserve that which we have and to train and prepare our people for the great economic changes which lie before them in what must be a not very remote future. We saw at the beginning of this article that our modern wealth is only about one hundred and fifty years old. The lapse of a similar period may see the end of that wealth, if we do not realise its basis, and do not comprehend and do our duty. Three centuries is but a breathing space in history, and if we desire to understand how it may come to be looked upon in the future, let us remind ourselves that Roman rule in this country lasted for four centuries, and seems to us to-day but a brief page in the annals of these islands.

Fortunately, the measures which are needed to conserve the national welfare indefinitely are precisely of the same order as are needed to increase our welfare in the immediate present. They may be summed up in the simplest words, by saying that as to our natural resources it is our duty to study, to control, and to conserve them, and that as to our people, it is our duty in respect of personnel to consent to a higher standard of culture, and in respect of industry to work co-operatively. Let us consider these things in their proper order.

First, as to our national assets. We have seen that the United Kingdom has some natural advantages and many natural disadvantages. We cannot alter these things, but we can develop and improve what we have. If we consider what measures we have taken in this connection, and contrast them with what has been done in Germany, we cannot but feel ashamed of our conceptions of conservation. We live on small islands, which means that we have a big coastline in relation to area, and that it is a simple matter therefore to arrange a splendid system of internal communications by rail and by water. Possessing this advantage, we have allowed private individuals to deprive us of a large part of it. We have actually handed the care and control of our great highways to private bodies of shareholders; whose only desire is to make dividends out of us. As a consequence, our internal waterways are a disgrace, not only to our country but to Europe. They have been not only neglected, but deliberately strangled in the interests of railway shareholders. As for the railways, we enjoy the highest railway fares and the highest railway

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rates in Europe, so that the country which invented railways gets less out of them than any other of the Western nations. You can travel in Germany, or Denmark, or Switzerland, or Belgium, or Norway in a comfortable carriage as good as our second class, for about the English third-class fare, and, be it remembered, our third-class or "Parliamentary" fare was forced upon the railways (who declared that it would ruin them) only by the intervention of Parliament.

As to freight rates, the value of our coal is lessened by the fact that it has to pay exorbitant charges if we desire to take it from place to place in our little country. The manufacturer finds himself handicapped at every point by excessive charges for the carriage of materials from the ports and for the conveyance of his finished articles.

When we turn to Germany we find a country which in this respect had great disadvantages as compared with our own. A glance at the position of Germany on the map reminds us that she has a very small coastline. What has she done in face of this natural handicap? She has constructed a great national system of railways and magnificent waterways, spending scores of millions of pounds upon the latter alone. This dual system of transport is worked co-ordinately, one being used to help the other, as it ought to be used. Heavy goods such as minerals and timber are carried upon the great waterways of Germany at nominal rates, and the national railways are correspondingly relieved of such merchandise, and are therefore better able to perform their proper functions. Whereas in England the railways strangle the waterways in order to get as much traffic to carry themselves at exorbitant prices, the German transport system, being national and patriotic in the best sense, seeks to make itself the instrument and not the taxer of trade. It is the German national railway system which has enabled Germany to fight as well as she has a war on two frontiers.

Or let us turn to another department of the national affairs. The British Isles have been almost completely denuded of trees. We have millions of acres suitable but neglected. Private capital does not stir itself, for trees grow slowly, and while nothing could be more profitable in the long run than afforestation, nothing could be less profitable for the individual entrepreneur. A Royal Commission has advised us to do what we ought to have done long ago without the prompting of a Royal Commission, viz., to take the matter in hand on a national scale, and to provide timber for the future of our country. In vain is the appeal made to us. The years pass during which timber might be growing upon ten million acres, to be not only a great national asset in respect of an important raw material, but to be the foundation of many subsidiary industries. While we do nothing in this connection,

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Germany possesses magnificent national forests which are carefully conserved, and in which silviculture has been raised to a science.

As to coal, we cannot alter the fact that every ton taken from our mines means one ton less in the national coffers, but we can most surely, recognising the vital importance of fuel, determine to survey, control, and conserve the resources we have. This, our main asset, ought to be guarded most jealously, and a permanent Power Commission should be established to study it continuously and to apply every known scientific resource to power production.

I pass to the preparation of the national personnel for the great changes which will take place in this twentieth century.

With ever-increasing rapidity modern industry is becoming scientific. In the early days of rapid British advance we made our wealth by rough and ready large scale work. The days are passing, however, when rough and ready, or rule of thumb, can avail a nation or its industries. Industry after industry is passing into the control of scientific managers. It is to be feared that this is not sufficiently realised by those responsible for the national welfare, and that it may not be realised soon enough to save us from industrial decline. The outbreak of the Great War found us short of many materials of industry made by the scientific Germans, and the Government hastily appointed a Committee to consider dyes and chemicals! What a commentary!

It is a thing most notable that with one or two exceptions, such as the turbine of Parsons, the majority of modern inventions and improved industrial processes have arisen in foreign countries. Such things as motor cars and flying machines, artificial silk and indigo, the incandescent gas light and wireless telegraphy, ferro-concrete building construction and modern blast furnace practice, have come to us from foreign inventors. We have the humiliation of seeing the British Parliament passing a new Patent Law to compel foreign inventors to work their patents in this country—a thing which was not needed in the early days of British industrial growth, when British inventors were placing all the world in their debt.

There is no reason to suppose that British native qualities have diminished since the days of the great British inventions, and there is good reason to suppose that it is our neglect of education which is responsible for our poor output of the great ideas in recent years. The modern inventor is not a man who can conceive a great new idea while shaving himself in the morning. In nearly every line of effort there is now accumulated an enormous amount of accomplishment, and if, therefore, a new discovery is to be made, a man has first of all to learn what has already been accomplished. Take, for example, the colour industry, in which Germany has become so triumphant that she may be said to be

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the colouring agent of the modern world. It is not possible for a bright and untrained young man, however capacious his intellect, to improve upon what the Germans have done without learning what they have done, and that means that to qualify himself to make further advance in producing coal-tar colours he must become a skilled practical chemist. Then, and only then, has he the chance to become a new inventor in that particular line. And so it is with nearly every branch of human effort at this hour. We have not enough scientific students, and we cannot therefore expect to produce a good crop of inventions.

And we must get rid of the conception that our people can be educated while we consent to education ceasing for the greater number of children at thirteen years of age. It was shown by the recent Departmental Committee appointed by the Board of Education to inquire into the numbers of children attending schools that, out of 4,084,000 children aged between ten and sixteen years, of all classes, only 2,113,000 were attending day school in 1906-7! That, be it observed, is to include the children of both rich and poor. If we take the working classes alone, it is true that the great majority of boys and girls finish training for ever at thirteen years of age—at the very time, that is, at which education, in the proper sense of the word, can begin. This means that, for practical purposes, we are leaving the national material untrained, and depriving it of its birthright. In a world which is ever growing more advanced, we are allowing the majority of the children to fall relatively behind. As the mass of acquired knowledge increases, relative ignorance increases. The average boy finds himself projected at thirteen years of age into an extraordinarily complex civilisation which it is not possible for him to understand, and he has forthwith to engage in work the meaning of which is never revealed to him. It is a process which cannot continue without bitter results for the nation in the time to come, that time in which it will need high qualifications if a nation is to hold its own.

And with the better training of our personnel must run the better organisation of men in the work that they do. There is only one remedy, as I have indicated, for the misuse of men and inventions, and that is co-operative work in the national interest. The insane folly of competition is increasingly recognised, but, unfortunately, its recognition is being accompanied by combinations which are not truly co-operative in the public interest, but which merely represent the combination of separate producers in an attempt to extract profit from society at large.

We see everywhere combinations of capital, of producers, and of distributors, which are concerned not with making the most of labour in the public interest, but with maintaining prices against the public interest. A number of capitalists producing a certain

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article combine themselves together with a big watered capital and form a monopoly, or quasi-monopoly, of the supply of an article. The actual economies resulting from the combination, instead of being distributed to the public, are creamed by the monopolists.

Further, we get agreements between combinations, on the one hand of producers, and on the other hand of distributors, making price agreements against the public. Price-maintenance has spread like wildfire through industry of late years, and it is now hardly possible to go into an ordinary shop without being charged artificial rates which are set up to preserve uneconomic interests.

What is good in such combinations is the recognition of the virtue of common action. What is bad in such combinations is the fact that they constitute co-operative movements, not to help the consumer and to assist therefore the production of wealth, but to wring artificial profits from the consumer and thereby to restrict the production of wealth.

In this connection co-operation has the future in its own hands. In the field of distribution it can beat down the absurd wall that now stands between the producer-consumer and the consumer-producer. In the field of production it can eliminate all unnecessary costs, and, informed and inspired by scientific management, produce the greatest amount of material wealth with the least expenditure of labour. The form of such co-operation may be uncertain, but there is no element of uncertainty as to the goal.



The Problem of Continuation Education.

BY H. M. RICHARDSON.

N EARLY a hundred years have now passed since England first recognised that the interests of a State demand the education of its people. In 1816 a committee of the House of Commons was appointed "to inquire into the state of education, chiefly in the neighbourhood of London." Despite Lord Melbourne, who questioned the advantage of general education as a means of promoting knowledge in the world, since people got on without it, the committee sat, and reported that the schools of the country were "poor manufactories, in which the formation of mind and character and mental and moral habits were grievously neglected." The committee added the dictum—then uttered for the first time with an authoritative voice—that the education of the people was a matter in which the State had a vital concern. It was not, however, until 1833 that the Government first manifested any practical sympathy with that view. In this year the Treasury made a grant of £20,000 towards the erection of school-houses. This was continued up to 1839, when the sum was increased by £10,000. Its interest in this matter of vital concern was still timid and tentative. In 1851 grants were given in aid of evening schools. But a Royal Commission on Education had to be appointed in 1858 before the State, by the epoch-marking Act of 1870, took up the task of making itself responsible for teaching the children of the community the elements of learning. From that time onwards development and elaboration have been rapid.

Six years later education was made compulsory, and fourteen years after that free. In 1902 Mr. Balfour's Act co-ordinated the elementary education given hitherto in Board and voluntary schools, and placed provided and non-provided schools of the various stages of development under the same controlling bodies: the county or borough councils.

From the inception of the idea that the State cannot stand by and see its people brought up in illiteracy and ignorance, the feet of progress have not loitered. But there are those who are still dissatisfied. Some are calling for the raising of the school age, already raised twice since 1870. Others are demanding that when a youth has left school he shall be compelled to attend continuation classes. This latter demand, with which I am chiefly concerned, is duplicate. It comes from the more self-sacrificing of the poor

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who desire to see their sons climbing the social ladder. It comes also from many employers of labour, who hold that superior education implies superior workmen, and, therefore, more efficient and cheaper production of wealth.

Already some employers of labour insist that youths in their employ shall attend evening continuation classes, especially such classes as are concerned with the particular branch of science or mechanics that is an essential factor in the student's daily labour. A few employers feel so keenly the desirability of taking advantage of the facilities that they pay their young men to attend classes. From all quarters comes the cry, "Educate, educate, educate!" It is difficult to get anyone to oppose the further extension or intensification of education. The workpeople of Lancashire may protest against the abolition of the half-timer. But they do so not from any dislike of education as such, but because they have a natural if, in the ultimate, an ill-grounded dread that to keep children out of the mills and factories until they are fourteen would mean a diminution of the family income for two years, or rather a postponement for that period of the increment accruing from children's labour. But the question arises as to whether, apart from the practical difficulties (with which I shall deal later), it is desirable to extend the field of education, to spread the net of knowledge so wide that all boys and girls shall continue to be taught in schools until they are sixteen, seventeen, or eighteen years of age, while working part time at a trade. This, I think, is a question which certainly ought to be discussed with an open mind by co-operators, who stand somewhat apart from the main stream of tendencies, motives, and ideals.

THE CO-OPERATIVE IDEAL.

As I have already said, the plea for compulsory technical or continuation education rests on two hypotheses: (1) the idea of the poor that superior education is the lever which may raise them, not collectively but piecemeal or individually, into positions of comparative affluence; and (2) the idea of the captains of competitive industrialism (competitive internally or internationally) that by training youth in the technology of trades at the public expense production will become both cheaper and more rapid.

If I am correct in thus stating the inspirational motives of the demand for more compulsory education, it is self-evident that co-operators should withhold their support from any such proposal at least until they have decided whether these aims—the elevation of *some* of the poor and the general speeding-up of production through the greater personal efficiency of the workers—are in themselves desirable. And I do not think that co-operators who hold to the fundamentals of their faith can come to an affirmative conclusion in either case. So far from this being so, the

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co-operative movement, I need scarcely say, has done much for an education of a very different order. It has been and is devoted to "the formation of co-operative character and opinions by teaching the history, theory, and principles of the movement, with economics and industrial and constitutional history in so far as they have bearing on co-operation; and . . . the training of men and women to take part in industrial and social reforms and civic life generally."

It is evident, I think, that co-operators who adhere to this ideal of education must view with suspicion, if not downright disfavour, any endeavour to fasten on the youth of the country an education so opposed as would be the teaching of the purely individualistic and utilitarian concept of progress and society. For it is obvious that youth's capacity for learning is limited. A young man cannot labour eight or nine hours a day in a mill, mine, or workshop, then give an hour or two to applied mechanics, chemistry, commercial arithmetic, magnetism and electricity, or suchlike subjects, and yet be able to find time for the more liberal education connoted by the co-operative formula.

It may be, however, that there are "practical-minded" co-operators who, while attaching considerable importance to the first principles and theory of their movement, would be willing, for the sake of an immediate gain to the nation in happiness and prosperity, to forego the propagation of co-operative ideals. Accepting the common view that the happiness of a people is commensurate with the prosperity of their nation (as indicated by Board of Trade returns of imports and exports), and assuming, moreover, that the prosperity of a nation is dependent upon the industrial skill of her working class at least as much as upon the organising genius of the captains of industry, such a co-operator might hail compulsory continuation or technical education as a meliorist thing to be sanctioned, even though it retarded the coming of the co-operative commonwealth. That is a point of view not to be lightly dismissed. It is, however, one from which the practical mind may be moved, perhaps, by a contemplation of facts that, while they have no place in the individualistic philosophy, ought not to be overlooked by those of us who are striving to weave a finer fabric of life and civilisation.

CONSIDER GERMANY!

Compulsory technical and continuation education have long been essential factors in German life and industry. "The view that technical training following upon a good general education has become indispensable to the industrial and commercial success of a nation commands the unreserved assent of the German people," writes Professor M. E. Sadler, in his invaluable comparative history, *Continuation Education in England and*

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Elsewhere. In nearly the whole of the twenty-five states that constitute the German Empire, such education is obligatory either by State law or local bye-laws. By the Imperial industrial law of 1891, employers of labour are compelled to grant to their apprentices or other workers (including all male persons and female clerks and female apprentices) who are under eighteen years of age the necessary time for such attendance as is required by the local authority of the district. Generations before this, however, the need for such training had been recognised. In 1869, under the terms of the regulation of industry, employers were obliged to allow their workmen under eighteen to attend continuation schools, and such workmen were compelled to attend. Everything in Germany favoured such education manifesting itself at its perfect pitch so far as it can in the orbit of capitalism. The people were accustomed to discipline, and they had the studious bent. And it must be admitted that, so far as the material prosperity of the Empire is concerned, the time, money, and talent spent on inculcating a taste for research and a scientific knowledge of the ways and means of industry have been magnificently justified. No great country has advanced industrially more rapidly than Germany. Nowhere else in the old world have the complexities of commerce been so simplified or the mechanisms of production so highly organised. The output per head of the population has increased amazingly, and, during the last forty years, Germany, from being a congeries of small states, has become a great, powerful, and prosperous Empire. It may be said that the war of 1870-1 was the direct cause of Germany's rise. But it can be said with equal truth that the French were defeated very largely because they were opposed by a race superior in education and discipline. It was indeed recognition of what education had done for the race in endowing it with the potentialities of military triumph that helped to enamour the German people of continuation schools. But, although I must admit the Fatherland's industrial greatness, when measured either by the *per capita* products of her people or by the total wealth, I submit that it is impossible to demonstrate any commensurate increase of material or spiritual happiness to the working classes. Readers of this *Annual* will scarcely need reminding that the proletariat of Germany is no better off than that of Great Britain. Mr. J. F. Mills, in his contribution to the *Annual* for 1914, threw the searchlight of a peculiarly penetrative mind on the food problem of Germany, and the conclusion to which all must come who accept the data he had collected from authentic sources is that, despite the benefits of national compulsory elementary, continuation, and technical education, the German people, so far as material comfort goes, are rather worse off than we. This conclusion is supported by our Board of Trade comparative statistics, which show that the German artisan works longer for

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less pay than the English artisan, and that the cost of living is higher there than here. Berlin, probably the most highly organised and, in certain ways, the most efficiently managed municipality in the world, has an infantile death-rate that would make even a Lancashire mill town blush. Wages during the last thirty years—the period of the greatest expansion of industry—have not risen in proportion to the rise in the cost of living, whether we take the prices of commodities or rent. And such increases in wages as have been won can be traced in Germany, as in England, to industrial co-operation among workmen rather than to any other cause. They have been wrung from reluctant capitalism by the weapons common to trade unionism, both in highly educated and very uneducated communities.

EDUCATION'S SOLE VIRTUE!

The most that can fairly be argued on behalf of education from the view-point of the economist is that, generally speaking, the more highly people are educated the higher becomes the minimum standard of living which will satisfy them. So far as the teachers and the books have fanned the flame of discontent with existing things and aspiration towards better living, and thereby driven workers to organise themselves for the amelioration of their common lot, education from the proletarian point of view has been justified. But in no other way. That it has enabled here and there one to rise out of his class, to become a manager or an official where otherwise he would have been a labourer, or through bursaries and scholarships to graduate into the professional ranks instead of remaining a weekly wage-earner, is undeniable. But, as off-setting this advantage, it can be argued with at least a perturbing plausibility that on the whole education, and more particularly technical and continuation education, not inspired by the co-operative ideal, has done a disservice to the workers as a class. It has been a ladder upon which many of the most talented of the offspring of the toilers have mounted to the middle class, and consequently have been lost as leaders of their own kind in its never-ceasing struggle—never ceasing, however subterranean it may sometimes be—for betterment. Young men who, by their individual effort, have surmounted the barriers of poverty and humble birth and become holders of positions of responsibility and handsome remuneration, naturally enough shed or suppress their youthful passion for social justice. It is difficult for them to retain belief in the fundamental wrongness of the individualistic competitive system which has placed them, as the reward of their own merit, where they are! It is, indeed, permissible to suggest that had there been no compulsory education the working classes might have been further advanced towards the co-operative commonwealth than they now are. For this reason: that then only the men of character and talent would have become

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literate, and being literate they would have led. But where all are literate in some degree by Act of Parliament, not by their own volition, the task of picking leaders becomes a problem, and, as the present system can offer larger prizes than can the causes of the future, it follows that many of the gifted sons of the lowly are lifted into the dominant or the professional class before they have had time fully to realise the wrongs of their own. This means that potential powers of organisation and inspiration are diverted from the army of labour to buttress the fort of capitalism.

WHAT TEACHERS LEARNED.

Still on this question of whether education or knowledge is in itself a sufficient lever for lifting humanity to better things, I would call attention to a significant and, in my opinion, conclusive piece of evidence in support of my negative contention. The elementary teachers of the nation are notoriously ill-paid. They are entrusted with a work of wondrous delicacy of almost incomparable importance, for it may be said that the teachers of to-day bear on their shoulders the nation of to-morrow. Anyone ignorant of the facts would think that these men and women who mould the mind of the race at its most malleable age would be socially honoured and well paid. This, however, is not so. And—this is the point which I wish to emphasise—when the teachers, growing conscious of the injustice done to them, determine to improve their lot, they do not attempt to do so by learning how to teach better, but by organising themselves into a trade union, and using exactly the same weapon that unskilled labourers and dockers, or engineers and other skilled artisans, take up when they become conscious of intolerable oppression. The successful strike of the Herefordshire elementary teachers for increased salaries a few months ago was negatively a notable demonstration of the fallacy that the way to Utopia, the ultimate aim of all sincere reformers, is through the doorway of the schools. If education cannot override the economic laws of supply and demand in the case of its practitioners, what hope can it hold out by doing so to its pupils?

THE WAR INTERVENES.

So much of this article had I written when the great war burst upon us: I am continuing it amid the turmoil of a tottering civilisation, not knowing, so obscure is the future, whether it will ever be finished or published. But whatever happens as the result of the European conflict, it is, I think, quite evident that I should be wasting my own and my readers' time were I to resume this contribution without taking account of the modifications that must necessarily be made in any preconception of what the article was to be.

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I had intended to follow up my case for the consideration of the economic and democratic merits or demerits of continuation education with a comparison of what has been done in the various countries of the old and new worlds. After that I should have approached the question of compulsory continuation education from the point of view of practical politics. In this section I should have shown that, whether the theory of compulsion is sound or unsound, there are so many obstacles in the way of applying compulsion that an enormous extension and re-valuation of the educational machinery would be necessary. In July, 1914, the moment immediately preceding the war, there was little possibility of inaugurating obligatory continuation education. And for this reason: there was not in the country a sufficient number of teachers properly to teach even such youths, young men and women as attended continuation schools either of their own choice or at the behest of the few employers who made such attendance a condition of their employment. The classes in the technical schools and the continuation schools were much too large. It is one thing for an elementary teacher armed with powers of inflicting corporal punishment to maintain discipline among a class of fifty boys or girls. It is quite another thing for the same teacher, after his trying daily duty, to keep in order even thirty-five youths, some of whom wish to learn, while others are in school simply because their employer insists upon their presence. My inquiries among evening class teachers convince me that compulsory continuation education for the community at large would be very costly and immensely wasteful. It would entail an enormous expansion of the army of teachers; and, unless such education was to be perfunctory and inadequate, the standard of learning among teachers, if not the standard of teaching, would have to be raised. And these two conditions could be fulfilled only by raising the economic status of the teaching class. The mental equipment for teaching in its higher branches is such that the possessor of it has other and fairer avenues of social advancement open to him. And it is not surprising that so many young men who have qualified themselves to teach abandon the pedagogic profession for business or the Bar, either of which offers chances of larger rewards. Most of those who remain faithful to their first love have a true vocation for it, and bitter are their complaints that they cannot do their best by reason of the understaffing of schools or, in other words, the overcrowding of classes. Really conscientious work is necessarily a rarity. A continuation schoolmaster has to choose between two evils. Either he must neglect the thorough education of some of his scholars in the interests of the discipline of all the scholars, or he has to neglect the discipline of some (that is, he must secretly countenance the inattention of some so long as they are quiet) in the interests of the education of those pupils who are keen to absorb knowledge. With a class of not more

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than twenty he could both maintain discipline and instil instruction. But a class of over thirty means a class in which the clever and keen will be taught and the dull or indifferent neglected. Is it worth while to spend hundreds of thousands a year to develop continuation or technical education along compulsory lines, which would inevitably mean the multiplicity of the dull and indifferent scholars out of all proportion to the keen and interested?

INSTEAD OF APPRENTICESHIP.

There was another point which to my mind was of the highest importance. The theory of the advocates of compulsory continuation and technical education is that boys can be saved by a course of technical study from the penalties incidental to the indiscretion of entering a blind-alley occupation. At the present time the boys who in Manchester, on leaving the elementary school, become "nippers" (assistants to lorry drivers) tend to drift into the most casual labour, or else they finally enlist in the Army. "Make them learn a trade," say the educationists, "and when they have done with boyhood and want to be earning a man's wage they will be equipped with the necessary knowledge." I do not think it necessary to offer many reasons in support of my contention that this is a fallacy. It may be true that each of Napoleon's privates carried a field-marshal's baton in his knapsack. If so, it is fairly obvious that the huge majority of the privates pawned their batons for bread and butter. It may be true that technical training would make everyone competent to do skilled work. It is unfortunately equally true that there is not normally enough skilled work for all to do. On the contrary, there is always a residue of skilled men out of work. Trade unions, recognising this fact, deliberately try to limit the number of apprentices who shall be taught a trade. They fear a flooding of the market, because they know that the greater the surplus of labour the smaller is the market value of the labourer. Now, compulsory technical education would be tantamount to apprenticeship. Indeed, it is largely because of the decay of the apprenticeship system that compulsory continuation education is suggested. If all were compelled to learn a skilled trade it is obvious, assuming the economic perception of trade union leaders to be accurate, that we should soon have so large a margin of unemployed skilled men that the market would be glutted, and the wages of the skilled artisan would be depressed almost, if not quite, to the level of subsistence of an unskilled labourer. On this point Mr. Charles Towers, in *Germany of To-day*, says: "That this system (technical education) produces a scientific class of workmen is, of course, fully proved, and scientific workmen make for rapid national progress. But it is at least a matter of dispute whether the individual profits by the system." As I have already suggested, it is arguable that the main tendency of training in the technology

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of trades is to bring about those very results which trade unions declare to be the consequence of allowing employers to take on as many apprentices as they can accommodate. If this is so it must be obvious that the policy is not one to which intelligent trade unionists will give their support. It is, indeed, less defensible from their point of view to give State aid to a compulsory system that leads indirectly to the depression of wages than to permit of the restoration of the apprenticeship system. For this reason: that the apprentice is paid to learn his trade, whereas the conscript pupil of a compulsory class would obtain his training at the expense of a public which would ultimately be impoverished by that very system. Nor is that the only danger to be discovered in the proposal.

THE VICIOUS CIRCLE.

The symptoms of another evil arising from technical education are already apparent, and this evil would be intensified with the more general spread of such knowledge. I refer to the introduction of the automatic machine. Perhaps the highest manifestation of the thinking machine is the automatic calculator, which enables schoolgirls to perform feats of mental dexterity that until a few years ago could be achieved only by skilled clerks. The automatic calculator, in the hands of a sixth standard child, can estimate, count, subtract, and work out involved sums in commercial arithmetic more rapidly and more accurately than could a chartered accountant. The automatic calculator may be taken as a symbol of the commercial and industrial world. Capitalism is constantly readjusting itself so that its profits shall not fall below a certain level. To safeguard itself it must do many things. Within the limits laid down by trade unionism it speeds up men until they are producing the last ounce of which they are physically capable. If the men demand higher wages and win them, machinery—much of which is the fruit of technical training—is introduced which enables production to be increased at a smaller cost. Should the men then determine to win for themselves some of the advantages that accrue from these improvements in methods of manufacture, capitalism calls to its aid women and juvenile labour. During the last few years the number of machines invented to do skilled work, without capitalism employing skilled workers or paying wages sufficient to meet the cost of a family's living, has been the most amazing development in connection with industry. Some time ago I investigated the methods of manufacture of nearly every material and article in common use, and wherever I went I saw automatic machines that, with no more skilful attention than a youth or girl can give, were doing work that twenty years ago was done by craftsmen and artisans. There is no need to describe the innumerable mechanical devices that have enabled boys and girls, without any apprenticeship, to

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make articles which their fathers could manufacture only after serving many years in acquiring a knowledge of the tools and the material. Knowledge of such inventions is general among all people who earn their daily bread in field, factory, or engineering shop. They know, too, how such inventions have displaced adult labour for juvenile labour, and men for women, and the skill of communities by the skill of the individual inventor. Whether in the long run all this ingenuity which manifests itself in the invention of labour-saving machinery proves a boon to humanity is a point not yet settled. The immediate matter of concern is that it saves labour, which means (for capitalism thinks in terms of money, not of human happiness) that the amount of wealth absorbed in wages is diminished without any compensation to labour in its other role of consumer. Indeed, since the automatic machine became the factor in production that it now is, the cost of commodities has risen by about 30 per cent., while wages have shown only a very slight upward tendency. Cost-of-labour-saving machinery (to give it its true designation) has made the rich richer and the poor poorer. And I do not think that anyone will venture to suggest that the force of invention has spent itself, that to the hundred and one things which can be done to-day by machinery that were once done by man there will not be added all the other functions of manufacture. We are, indeed, but on the threshold of the automatic age. It is not difficult to envisage the day when man, apart from the perfunctory pressing of a button, will have no work to do.

If this seems to be a digression from the subject of this paper I would suggest to the reader that it would be a waste of national wealth and human energy to build up a great edifice of compulsory education for the purpose of teaching youths to do work which, the moment they demand a wage that threatens profits, would be done by raw boys and girls with automatic machinery's artful aid. The pupils of the working class who would benefit from such education would be those to whom knowledge was a spur to their inventive faculty. These would be few in number, no doubt, but they would be sufficient to give an enormous impetus to the automatic apparatus. The few young men of exceptional ability would succeed in making names and, perhaps, fortunes. But the price would be the decay of communal skill, the cheapening of labour, and the deterioration of the race.

For these reasons—which I may recapitulate by saying that while technical education has added to the wealth of nations it has not added to the wealth of the workers, and, inferentially, can never do so—I suggest that co-operators should be suspicious of any movement towards fastening compulsory technical education on the people.

But it must not be assumed that because one is opposed to compulsory education under present conditions one is necessarily

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opposed to either continuation or technical education in all or any circumstances and conditions. On the contrary, it is quite evident that if such education can add to the prosperity of a nation or to the profits of capitalism it can be made an instrument for human happiness, culture, and comfort. Whether it will be so used or not depends upon the intelligence with which "the common people" can grasp the lessons of the immediate past—the past which, as we now see, has been a period of the amassing of great wealth in a few hands and the amassing of huge armaments, the bitter fruits of technical education, which have been used to tear the fabric of civilisation, of which we believed education was the chiefest attribute!

WHAT WILL BECOME OF US?

Here I call again upon the example of Germany, for Germany is the example of extremes both of the value and the vice of a system which produces automatic machines fed by human automatons. The various states of the German Empire have insisted upon all young men becoming scientifically-trained workers, just as they have insisted on all young men becoming scientifically-trained soldiers. But they have consented, constitutionally, to leave within the sole wisdom of the War Lord the decision as to whether the whole agglomeration of wealth, the product of millions of men over many years, shall be destroyed in a few weeks or months of devastating war. It seems plain that there has been something wrong with the intelligence of the German people. They have learned to do everything except to control their own national destiny. And this flaw, common in a lesser degree in other highly-civilised countries, has been due to the devotion to education in material things without regard to the human purpose for which such material things should be used. How the German democracy will emerge from the holocaust that is now destroying the manhood of Europe none can say. My concern is with the democracy of Great Britain. What shall we become in this crucible of conflict? What we shall become depends on what we determine to do in the future in regard to the education of the rising generation. Are we to resume and intensify the system that has culminated in this monstrous debacle of sanity and progress? After the period of impoverishment are we again to enter upon a period of unorganised production, accelerated by all the devices of technology, in the interests not of the nation but of the favoured few, so that our children will see, as we have seen, wealth increasing by leaps and bounds in the lap of the possessors, while the wealth producers go in want, and then the whole edifice come tumbling about their ears at the word of command of secret statesmen? It is a question for democracy to determine. It is a question in the settlement of which the co-operative movement may mean much.

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We want an educated democracy; and by educated I mean not merely or mainly that the democracy shall possess the narrow if important learning which enables men to make automatic machines, to build bridges, lay rails, forge bolts and guns, or build ships. I mean the education which enables people individually to taste to the full the fruits of art and literature, and collectively so to control matters that there shall be neither lack for the industrious nor luxury for the idle.

THE TRUE EDUCATION.

"It is only by a liberal education that we learn to feel respect for the past or to take an interest in the future," said Hazlitt. "The entire object of true education," declared Ruskin, "is to make people not merely *do* the right things, but *enjoy* the right things; not merely industrious, but to love industry; not merely learned, but to love knowledge; not merely pure, but to love purity; not merely just, but to hunger and thirst after justice."

Hitherto an education such as that has been the privilege of the few people of wealth or of quite exceptional ability and application. The education which has been doled out to the poor has been either strictly utilitarian or else futile. The rudiments of learning they have been compelled to master; but beyond that what has been given to them to make them hunger after justice, to feel respect for the past, or to take an interest in the future? Very little. Advocates of compulsory continuation education may argue that it is because they recognise the shortcomings of the past that they desire amendment in the future. It would be ungracious to deny their goodwill. But knowing what education is in the present elementary and continuation schools, one is entitled to doubt whether compulsory continuation education would not be merely an extension of the elementary education which in no way meets Ruskin's demands. In plain words, would not any system of continuation education under the present social *régime* be directed towards inculcating a respect for that *régime*? Of course, I do not suggest that youths would be taught positively that things are now as they were in the beginning, and ever will be. But I do assert that by the exclusion of true teaching from the schools the pupils would waste much time in gaining false ideas about life. For instance, they would be taught the history of their own land according to the romantic historians. They would not be taught to interpret history by the light of economists. Glorified Mrs. Markhams would preside over the feast of historical dates, while Thorold Rogers would remain in the dusty library for such attention as might be given to him by stragglers from the main army of scholars. Again, the virtue of thrift would be inculcated by means of saving banks, but the elements of political economy, knowledge of which would suffice to put many young

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people on the path to co-operative ideals, would be withheld. Indeed, I venture to think that ordinary State education is subtly antagonistic to the ideals for which the co-operative movement stands. The co-operative movement is great and growing. But its best friends cannot blink the fact that many people are attracted to it in the first instance by purely individualist self-interest rather than by any consciousness of the nobility and naturalness of mutual aid. And this, I think, is due to the circumstance that hitherto the trend of education in early youth has been away from idealism and towards individualism and utilitarianism. How much nobler and wiser the world might have been had our governors begun in 1870 to educate the young in "the formation of co-operative character and opinions by teaching the history, theory, and principles of the movement, with economics and industrial and constitutional history in so far as they have bearing on co-operation!" But it was too much to expect that the people in authority would thus undermine their positions of power. It is too much to expect that of their own choice they will ever do so. If democracy is to be free from the fetters of competitive or monopolistic industrialism democracy must attend to the matter itself. It is because this proposition is to my mind irrefutable that I would appeal to the co-operative movement to use still more of its energy in diverting education from stereotyped and conventional concepts to finer usages.

FIVE POINTS FOR REFORMERS.

And I would lay down several essential factors in raising human life from the low level to which it has now sunk to a height it has not attained since the gradual breakdown of the mediæval guilds, which were truly co-operative in spirit:—

1. I do not think there can be a doubt that the school-leaving age should be raised to sixteen, and the half-time system abolished. Up to the age of twelve the average child is merely being prepared for education. Its mind is capable of learning by rote, but its powers of comprehension are so small that even were education all that Hazlitt or Ruskin desired the pupil would be unable to take an intelligent interest in the future or to acquire any passion for social justice. The normal boy, indeed, does not acquire a love of knowledge until he reaches his fourteenth year. At that age all except the dullest begin, if given the opportunity, to take an interest in literature, learning, and the affairs of current life. That opportunity is now denied to all except the children of the comfortable classes, or the talented children of the working class blessed with parents who are willing to make great sacrifices for their future welfare. The consequence is that we have a proletariat which, on the whole, can read (and mainly reads rubbish), write (but seldom exercises its power of expression), and do sums

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sufficiently well to work out racing odds or count its weekly wage! It knows little or nothing about the history of itself, about economics, art, or literature. Consequently, we have a rising generation which feeds on "comics" and "bloods," for which it pays out of scanty pocket money, while all the time there is the free library offering it the best and truest that genius has given to the world.

2. Having raised the age from fourteen to sixteen, the curriculum for the extra two years should be drawn up with a view to giving the young a yearning towards fine ideals of society. The object should be the formation of character rather than the training of mind. It is more important that people should live rightly than do arithmetic correctly, especially now that machines are "learning" to do our sums with an awful accuracy. And right living is the result of right thinking, and that, except in the case of the rare people gifted with intuition, is to be achieved only by an interested study of the great masters, and by working from a basic belief in the virtue of mutual aid, the sanctity of justice, the organic nature of society, and the interdependence and brotherhood of man. So I would suggest that the two years of extra schooling should be devoted to the humanities, economics, literature, biology, logic, and such other subjects as would enable the youth on leaving school at sixteen to take an intelligent interest in the affairs of his town, city, or country, whether he was to be a labourer, an artisan, a clerk, or a professional man. For if a democracy has intelligence all other things worth having will be added unto it.

3. During school life no attempt should be made to teach lads specific trades. The most that an employer of labour ought to demand from the community is that the young people whom he engages shall be intelligent. If in addition to intelligence he gets skilled juvenile workers he will not pay them a man's wage. He will pay a boy's wage for a man's work—and will dispense with his men.

4. If employers desire that their youths shall study the technology of their particular industry they should be compelled to allow the youths to attend technical schools in the daytime, and either pay for such education or else pay wages to the youths for learning the trade. For, as I hope I have proved, such training is directly in the interests of the employers, and only very remotely, if at all, in that of the employed.

5. Continuation education should remain non-obligatory. If the school age of children were raised to sixteen, and the two last years were given up to such a liberal curriculum as I have sketched, the probability is that a great number of children on leaving the primary school would wish to continue their studies in the evening school, assuming that the education there given dealt sincerely

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with the large and absorbing problems that are apt to perturb the minds of intelligent adolescents. The intellectual attainments of teachers in these schools would need to be higher than those of many of our present-day elementary teachers, although observation drives me to the conclusion that much of our teaching is perfunctory and unsatisfactory because the teachers are tied down to curricula over which they have no control. Some time ago a teacher was condemned for talking to her class about a matter of importance not in the curriculum. Many teachers are firm believers in the desirability of the co-operative commonwealth. They are not permitted, however, to mould the minds of their pupils along these lines. They must teach every subject amenable to class or party or economic colouring according to the colour of the dominant class, and this they do, not by a direct glorification of the existent state, but by silence on the possibility of alternative states. So it happens that boys can pass through the sixth standard in utter ignorance of the diverse theories of society held by the adult world. I am not, however, suggesting that State servants should teach the young what they ought to think about individualism, co-operation, socialism, or syndicalism. I do suggest that before the age of sixteen every boy should have had the principles of these divergent economic creeds explained to him from authoritative text-books and without bias on the part of the teacher. Fifty-seven years have elapsed since Buckle, in his history of *Civilisation in England*, wrote: "Political economy has been raised to a science, and by it much light has been thrown on the causes of that unequal distribution of wealth which is the most fertile source of social disturbance." Is it not time, I ask, that young people should be compelled to take some interest in this science, a knowledge of which is necessary to any rational criticism or reconstruction of society?

In suggesting these lines of change I am conscious of propounding a policy quite alien to the policy of the past and present. But to my mind the present State education is both anachronistic and paradoxical. Compulsory education is itself an experiment in or phase of collectivism or compulsory co-operation, and therefore essentially opposed to *laissez-faire*. Nevertheless, such colouring as can be given to the subjects taught harmonises not with the architecture of the State education edifice itself, but with the, so far as education is concerned, obsolete doctrines of the philosophical radicalism of the middle of the nineteenth century. Nor is it only by neglect to awaken the young intelligence to possible alternatives to the present social system that the school curricula support the existent state. They do so by direct practice. In various centres schools of domestic cookery have been established, and wherever this has been done the pupils are taught as though it were an accepted principle that they are marked out to be poor men's wives. The writer of one of the papers in

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Continuation Schools in England and Elsewhere, discussing the sort of training that should be given to girls in public secondary schools, says: "In mathematics . . . the keeping of accounts and the calculation of interest, the measurement of areas and working to scale in garment cutting, the calculation of dietaries and of prices—these seem to be all that is necessary." Not a word, it will be noted, about the nature of interest, although the writer was a member of the Fabian Society! Again this writer, describing the "living-room" which she suggests should be set up in each school for training in home life and domesticity, says: "Cheap oilcloth, such as would doubtless be selected for the floor, would contrast with the good linoleum now supplied to some rooms in the schools." These passages are illustrative of the tendency to adapt children to their environment, to make them if not content with, at least tolerant of, their position in life—the toleration that people extend to inevitabilities. That this is the true end of education I do not hesitate to doubt. It must indeed be obvious that change of environment is what we really need, and this will be brought about only by the application of trained intelligence to the task of getting the most and best out of life. To teach children, youths, and adolescents with one hand to become experts in the production of wealth, and with the other hand how to make the best of their poverty, is an education which the co-operative movement should endeavour to destroy, for not by its means can we approximate to any semblance of the perfect state.

A CO-OPERATIVE GRIEVANCE.

It may be argued that we must take things as we find them; that the task of teaching deeply—by which I mean delving below the surface and discovering root causes—is too difficult when the pupils are not adults; that, in any event, economics and social ethics are controversial matters, the introduction of which into the schools would arouse a storm even greater than that which has not yet spent itself around the question of religious teaching. To the latter of these objections I would reply that if co-operative economics are true the co-operators who are now contributing through rates and taxes for the upkeep of the elementary, secondary, and continuation schools are suffering, however unconsciously, just such an injustice as that Nonconformists declare they suffer under the Act of 1902. I mean that their children are being taught in an "atmosphere" permeated with the principles of the individualism which is the negation of co-operation. From an educational system, for which its founders claim that it fits young people for life, economics cannot be banished. Actively or passively it must be taught. If the subject is never mentioned, then, so far as school life has any influence on the mind of the next generation of adults, that mind will be biassed

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in favour of the economic system which obtained in childhood. So it happens that the thinking working-class young man who left school at thirteen or fourteen never knows anything about political economy until a chance word at a street-corner meeting arrests his interest and leads to a more or less haphazard and unscientific study of the most important factor of human life.

If in the foregoing I have seemed to lay too much stress on the need for supplanting science, technical training, and the other items of the customary curriculum by a less utilitarian education—an education directed towards the formation of social ideals as to which as yet the great bulk of the people are either indifferent or ignorant—my apology must be that I am writing at a moment when European civilisation is being visibly destroyed. What springs from its ashes will depend entirely upon the wisdom of the various democracies. The war may mean a relapse into a state more miserable than that induced by the Napoleonic wars. It may mean a release and a leap forward towards a simpler society based upon co-operation instead of competition. If, during the last forty years, the boys and girls of the proletariat had received an education such as I advocate and have endeavoured to outline, there would be little fear for the future, no matter how menacing this moment may be. The reconstruction of this shattered society would then have been planned with foresight, sagacity and knowledge, not in the interests of the few who make wars while escaping the worst of war's consequences, but in the interests of the millions who, because of the false teachings, the evasions and suppressions of the schools, are led blindfolded to the front, there to fall in quarrels of which they are ignorant, waged for rewards which they may not hope to share.

THE ONLY WAY.

Indeed, had the nations been so educated, this awful catastrophe could scarcely have happened. For the peoples do not want war and would not suffer it had they the power to prevent its commission. That power can come only with a knowledge of many things that hitherto have been forbidden or withheld from them in their youth.

A few years ago Sir Oliver Lodge gave it as his opinion that the nation which first fed its children would in the course of two generations be the greatest nation in the world. We have begun to feed our children, mainly because of one irresistible reason: that money spent on teaching ill-nourished boys was money wasted. The reform was an item in the popular campaign for efficiency. I have no quarrel with it. On the contrary, the improved physical and mental attributes of the child of to-day, compared with the child of ten years ago, are so marked that all fair-minded and competent

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observers must come to the conclusion arrived at by Miss M. E. Bulkley that, "so long as economic conditions remain as they are, the provision of school meals is a necessity." I find it difficult, nevertheless, to accept Sir Oliver Lodge's optimistic prophecy. Nations do not live by bread alone. Humanity in its groping towards perfection does not crawl army-like upon its stomach; its marches or marks time to the tune set by humanity's mind. The nation which first teaches its democracy to think, to know itself, its history, its conflicting potentialities, the why and wherefore of social disturbances—that nation, in the course of a few generations, will be, if not the greatest, the happiest in the world. The economic conditions which necessitate the bread of charity being given to hundreds of thousands of the children of the workers cannot long survive the acquisition by those children of the knowledge of the origin and cause of those conditions. They know the consequences too well.



Some Ancient Civilisations and their Lessons.

BY BEDFORD POLLARD.

Neither does strength depend on extent of territory any more than upon number of population. The strength is in the men, and in their unity and virtue. A little group of wise hearts is better than a wilderness of fools. No government is ultimately strong but in proportion to its kindness and justice.—*Ruskin.*

THE word civilisation is often on our lips, and few probably realise how its meaning has become distorted. To compare or contrast civilised powers to-day means usually to estimate their relative military strength. The whole scope of the word “civil” renders it distinct from “military.” *Civil* and *military* are two opposing aspects of national life, and the dictionary defines civil as “not military.” It is well that we should keep the true meaning of the word clearly in mind in using it in its ordinary sense. A civilised nation is one that studies the arts of peace, education, and commerce. Militarism is the bar sinister across its fair scutcheon. Unhappily for the human race, the bar sinister has almost always been attached. The element of barbarism has never been eliminated.

In primitive civilisations it is impossible to conceive how national prosperity could have been built and maintained without military support. But the ideal state to which each nation in some degree aspires will not be so constituted. There can scarcely be a more adequate delineation of the ideal state than as given by Robert Owen: “The only solid foundation of public liberty is to be found in the full supply of the wants, in the virtuous habits, in the intelligence and consequent happiness of the whole population”; and militarism must always stand in the way of this. And yet, impossible as the non-military state might have once been, the tremendous truth of the words “All they that take the sword shall perish with the sword” may be observed. As Norman Angell has well said:—

If during long periods a nation gives itself up to war, trade languishes, the population loses the habit of steady industry, government and administration become corrupt, abuse escapes punishment. . . . Was it mere hazards of war which gave to Great Britain the domination of India and half the new world? That is surely a superficial reading of history. It was rather that the methods and processes of Spain, Portugal, and France were military, while those of the Anglo-Saxon were commercial and peaceful. . . . One was a process of conquest, the other of colonising. . . . How may we sum up

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the whole case, keeping in mind every empire that ever existed . . . ? In all and every one of them we may see the same process, which is this: If it remains military it decays; if it prospers and takes its share of the work of the world it ceases to be military. There is no other reading of history.

The problem touches us closely to-day. That "war begat the noble and war begat the slave" the history of bygone civilisations amply proves; and present-day conditions still attest the truth of Rousseau's words: "*L'homme est né libre et partout il est dans les fers.*"

PRIMITIVE MAN.

Whatever ideas we may entertain as to primitive man and the Darwinian Theory, we must naturally narrow down the origin of the human race to some kind of starting point. The presence of man in hitherto undiscovered lands might seem to indicate several distinct geneses; but a consensus of various sciences comes to our aid, and proves at least the improbability of this. As in vegetable life, so in human, a common origin is often deduced. The new world, discovered, perchance, by hardy Norsemen, and, later, by Columbus, isolated from the old by vast oceans, was not always so severed. Across the Atlantic bed lies a submerged land extending to Guiana in South America. The same applies, and with more weight, to the Pacific. Between the coast of Asia and America a long volcanic chain lies broken.

Thus geology points to possibilities, comparative anatomy—the study of skulls—affords some guidance, comparative philology and religions add to the sum of evidence. That interesting civilisation discovered by the Spaniards in Mexico bore traces of Asiatic origin. There were traditions of immigration from the north. Mongolian speech seemed traceable in the language. The Red Indian and Esquimaux had a Mongolian ancestry.

Of ancient Europe science has strange stories to tell. The greater part of it was in darkness for ages, because it was not in touch with Asia. Iron and gold were first used in the East, and the Celtic metal worker's skill came through the Greeks. The alphabets in use to-day date back to Phœnicia, nineteen centuries before Christ, and their invention may have been based on Minoan script and Hittite pictographs of long before. Modern excavations by patient enthusiasts have lifted the veil that overhung the epochs of many kingdoms of antiquity, and the amazing stories that belong to the East have been revealed.

Not only do the splendours of ancient cities astonish, but the inscriptions tell how, underlying all the vanished greatness, was bloodshed and slavery.

The history of humanity is mainly the history of labour, and at first all labour was slavery . . . The record of the great social experiments of the past is chiefly a record of injustice and suffering. It is also a record of the disappearance of states in which those experiments were made.*

* W. Romaine Paterson, *The Nemesis of Nations*.

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The production of wealth was proportionate to the number of slaves. The expansions and débâcles of ancient powers were due to the inequalities within states and inequalities between states.

In the evolution of manhood, from the time when first the biped stood erect, lived on fruit or berries, formulated speech, learned his simple lessons from beast and bird, and hunted with precarious weapons for a living, to the discovery of sowing and reaping and providing for the future, long periods must have passed.

When we reflect that the original basis of human intelligence and sentiment was the instinct of lower animals, we need not be surprised when the palæontologist speaks of man occupying this world millions of years ago.

Before he rose to an intelligence in which the faculties were articulate enough to enter the realm of art, to draw, to inscribe, to invent, man was buried in a vast nebulous period in which a thousand years were as one day. Skulls and stone weapons and rude drawings on cave walls can only be dated by the geologist in the study of deposits.

At least we may be sure that the first wit-sharpener was hunger. A fertile spot well watered would tempt man from his wanderings. He would gather flocks and herds around him, become a breeder, learn to use the wool of his sheep and the milk of his kine. Slowly the unfledged spirit of inventiveness would guide in the building of habitations—hut, house, palace, temple. The trading instinct would appear. The caravan by degrees would come to bring an interchange of wares between tribe and tribe. Then from beyond the mountains jealous eyes, unused to peaceful industry, or, it may be, crowded out of other settlements, would view these developments, and warlike hordes would pour down, kill, and appropriate.

. . . Industry in some,
To improve and cultivate their just demesne,
Made others covet what they saw so fair.
Thus war began on earth: these fought for spoil,
And those in self-defence.

And thus fortifications and weapons of war were evolved.

BABYLONIA.

The hub of the ancient world, the centre of human activity, was Mesopotamia. It was in this land that the earliest legends of the race were born. Here, somewhere, was located the mythical Garden of Eden. Here fell the Deluge; and here, on Shinar's Plain, arose the Tower of Babel. Those scrappy passages found in the Old Testament pages have done little more than stir up unsatisfied curiosity over races of men with whom the children of Israel clashed. What legend and parchment could not supply, the picture stories and cuneiform inscriptions on rock walls and

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clay tablets, or on vase decorations, have yielded. Plainer than in human speech they have told to men of the 20th century A.D. the deeds and manners and customs of Sumerians, Assyrians, Chaldeans, Hittites, and Egyptians in those far-off times.

The civilisation of Babylon dates back into undiscoverable ages. As far away as 6500 B.C. the towns of Nippur and Eridu, north and east of the Persian Gulf, were outlets for Babylonian products. The Sumerian inhabitants, like the Hittites, were a yellow, beardless, Mongol race, and their chief city of Babylon was situated in the fertile plain of Mesopotamia, stretching between the lower Tigris and Euphrates, and extending to the Caspian Sea and the Delta on the Persian Gulf.

In some respects as in the Nile Valley, Babylon was subject to periodic overflowings when melting snows from the mountains swelled the rivers. One abnormal occasion was the Flood of Hebrew history, the story of which must have been derived from Babylonish sources.

Racial affinities did not prevent continuous wars in those days. To some extent they fostered them. The invasion of the Semites from Arabia took place over long periods of time dating back to 4000 B.C. Establishing themselves in different cities, they gradually became identified with various localities as separate nationalities—Syrians, Phœnicians, Chaldeans, Assyrians, Midianites, Hebrews, &c. Pre-eminently, Assyria and Chaldea were jealous rivals. For many centuries Babylon was the centre of commerce, “the brain of the East.” The diplomatic language of the then civilised world was Babylonish. Through Babylon caravans travelled from the Mediterranean to India, leaving raw materials and carrying to Persian bazaars the artistic work of this wonderful state, with other wares from the West. Its close connection with ancient Israel is seen in many directions. Abraham came from Babylonia—Ur of the Chaldees. The name Sinai was associated with the Babylonish moon god, and Nebo, where Moses died, was the name of the Babylonish Mercury. The Law of Moses was full of the Babylonian regulations.

Babylonian men of science first studied the stars, distinguished stars from planets, foretold eclipses, made magnifying glasses, observed the satellites of Saturn, developed a system of mathematics, invented sundials, and measured time by system.

Although these ancient nations were but tribes, the city of Babylon must have held a vast population. Province it might be called, covering, it is said, five times the extent of modern London.

The splendours of many ancient cities have often been told. Their ruins still astonish the world. The remains of temples and palaces of Thebes and Memphis in Egypt are among the attractions of the Nile tourist. The great Cathedral of Nôtre Dame, in Paris, could have been placed inside the Theban temple of Karnak. The palaces of Susa (Shushan), in the Persian province of Elam, in

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northern Asia Minor, were adorned with panels of cedar and gold, and mighty columns upheld the buildings. The gardens were so extensive that deer might be hunted for days without leaving the enclosure.

Of Nineveh we read in the curious Book of Jonah. Modern excavations have brought to light the splendour of its palaces, its sculptures and monuments. But all are dwarfed by the greatness of Babylon.

About 2500 B.C. the throne of Babylon was occupied by a monarch named Hammurabi. Quite recently what is called the code of Hammurabi was discovered, giving the laws of the land. This monarch called himself the righteous king, "one born to deliver the weak from oppression"; but a large portion of the code is framed in the interests of a class—the protection of property. Apart from this, there are some admirable regulations. "The rights of aliens are safeguarded, the relations between principal and agent are made clear, the responsibilities of merchants and bankers, the duties and obligations of husbands and wives are ordained."* If a highwayman succeeded in escaping from justice the man who had been robbed had to state on oath what he had lost, and the city or district governor in whose territory the robbery had taken place was bound to restore to him its value. Married women enjoyed some privileges and a good deal of independence.

A distinct industrial status had been found for unmarried women in large co-operative societies under religious sanction with vows of celibacy and strict attention to business. Unlike mediæval nuns, however, members of these orders were free mistresses of their time and labour; they lived where they would and worked at what they liked, insured by their membership.†

Let us picture for a moment this Babylon as it appeared in the later period, 604 B.C., when Nebuchadnezzar, "the King Mason," brought it to a pitch of unprecedented splendour. Herodotus, Xenophon, and Strabo have all told of this immense garden city. According to the former, Babylon was built four square. Each outer wall was fourteen miles in length. Meadows, orchards, cornfields, and pleasure grounds extended between the streets. The great temple of Bel (or Baal) was a quarter of a mile in length and in breadth. The building, in the form of a quadrangular pyramid, was more than six hundred feet high. So enormous was this structure that when Alexander thought to rebuild it from its ruins he employed 10,000 men for two months merely in clearing away the débris.

The famous hanging gardens were constructed, it was said, by Nebuchadnezzar to gratify the whim of his Elamite queen, who complained about the monotonous level of the Babylonian plain. The gardens were built up in the form of terraces, one above the other, and in appearance resembled a section of a vast

* *The Nemesis of Nations.*

† J. L. Myres, M.A., *The Dawn of History.*

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amphitheatre. Each terrace was supported by a vaulted gallery; and twenty walls, each twenty-two feet wide, supported the whole. On the highest terrace of all a pumping apparatus was fixed for drawing water from the river which flowed through the city. So high did the gardens rise that they appeared from a distance like a forest on the top of a mountain.

The walls of the city astonished all who first beheld them—seventy-five to one hundred feet high, and broad enough to allow two chariots to pass. Twenty-five brazen gates faced each way—one hundred in all; and the walls were defended by 1,500 towers, each two hundred feet high. A vast bridge, a thousand yards in length and thirty broad, stretched over the river, while a subterranean way was cut beneath.

On every hand canals and irrigation works were seen.

Each Babylonian city was governed by a chief priest, whose religion, however, did not embrace any sense of human brotherhood. But it is worthy of note that sacred and secular were not divided off like water-tight compartments.

There were three classes in Babylon, as there are three in the civilised state of to-day. They were the noble, the citizen, and the slave. The wars of these nations were chiefly undertaken to obtain slaves, who must have perished like flies; and with every war the arts of peace and honourable industry were interrupted and destroyed.

The condition of the slave depended to some extent in every state upon his intelligence, as does that of the worker of to-day. The mere beast of burden was valued purely as such. The average price of a sheep was 18s.; of a male slave, 30s.; of a female slave, 13s. 6d. A horse was valued at £7. 10s., and if it was a case of saving one or the other, the horse would be preserved. The reader may see some parallel here. Even in our enlightened twentieth century, where consideration for others is at least an axiom of Christian ethics, we are apt to wonder at the frequent warpings of self-interest and the deliberate ignoring of common justice. This fact, and our reading of Old Testament teaching on getting even with an adversary, the law of *lex talionis*—an eye for an eye—might let us down gently to the level of the religion of the Semites.

If Babylon adopted polytheism, so did the Hebrews; but essentially its religion was monotheistic. We might be disposed to question the possibility of a Babylonish or Assyrian king claiming divine authority in the perpetration of revolting cruelties. But it was what the Israelite judges and rulers did, and, more to the point, it is what priests and kings of established churches are still doing, when they pray for victories, or chant *Te Deums* over slaughtered foes.

The atrocities committed by Assyrian and Babylonish kings on rebellious tribes—perchance before they had reached the acme

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of cruelty in saving them alive to be slaves, or, it may be, when the slave market was absolutely glutted—are almost inconceivable. It was the proud boast of one of these monarchs, after some of his victories, that he had flayed alive the leaders and covered the walls with their skins; that he had buried some alive and crucified and impaled others; that he had burned alive 1,000 captives; that he had cut off hands and feet, nose and ears, and torn out eyes; that he had crucified seven hundred men.

The long-drawn-out agonies of slavery are revealed on some of the Assyrian sculptures showing processions of "slaves being dragged by chains sometimes fastened to their lips, or being forced, under the lash of the overseer, to move immense blocks for the construction of temples and palaces."* They are shown, too, in the detailed laws of Hammurabi, in which the slave appears as a mere animal, branded like the ox, and compelled to wear clay tablets round the neck engraved with the owner's name.

And so we come to realise that the splendour of Babylon was built upon the sighs and woes of slaves. Under the lash of the taskmaster, in a temperature of sometimes 124° in the shade—a land where camels are said to be unable to live and birds sit panting on the date palms with beaks agape for want of air—these miserable creatures were forced to toil. Slavery not only demoralised the slaveholder, whose character was debauched by disregard of suffering, and by luxury and idleness; it ruined the freeman, who, unable to earn a livelihood in competition with unpaid labour, was forced into the ranks of servitude himself.

Whatever flaws critics may discover in the Hebrew polity, the contrast of their slave laws with those of Babylon are too remarkable to pass by. Traditions of their own bondage might have created a spirit of consideration in them, but the anomalies of human nature, on the other hand, might on that very account have made them more cruel. But explain it as we will, the contrast remains. Death was the sentence on the harbourer of the fugitive slave in Babylon. It was commanded to give him refuge in the Law of Moses. Every Sabbath the slave rested like his Hebrew master.

And yet, it may be said, those empires lasted for millenniums, in spite of sullen hatreds and divided interests. So long as there was human fuel for the fire, and strength remained with the strong, it would be so. Yet the story of bloodshed and conquest in Asia Minor over those vast epochs reveals not only continuous race animosities but the shifting of central authorities to and fro. All the while disintegration was going on—the fuel was becoming exhausted. External and internal causes brought Nemesis at last. There came a night when Belshazzar feasted in his palace with a thousand of his lords, and the magic writing appeared on the wall. On that night the Medes entered the city, and Belshazzar was

** The Nemesis of Nations.*

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slain. How many thousands of miserable creatures would hail the conqueror as a deliverer! "Babylon was great. She used science and she used art, but she abused humanity. . . . And when we see her ruins lying like a vast, mysterious autograph scrawled over the desert, her history appears to be full of warning."*

The impassioned words of the Hebrew prophet may fittingly close the chapter:—

And Babylon, the glory of kingdoms, the beauty of the Chaldeans' pride, shall be as when God overthrew Sodom and Gomorrah. It shall never be inhabited, neither shall it be dwelt in from generation to generation; neither shall the Arabian pitch tent there; neither shall the shepherds make their flocks to lie down there. But wild beasts of the desert shall lie there, and their houses shall be full of doleful creatures; and ostriches shall dwell there, and satyrs shall dance there; and wolves shall cry in their castles, and jackals in the pleasant palaces; and her time is near to come, and her days shall not be prolonged.

THE MEDITERRANEAN CIVILISATION.

In the year 1822 there was born in the home of a poor German pastor a boy who was named Heinrich Schliemann. In later life the brightest memories of his childhood were the stories of romance and marvel that were told to him, among which his favourite was that of the Trojan War. The discovery of the buried Latin cities, Herculaneum and Pompeii, brought a new spirit of wonder to the boy's mind. How could a great city like Troy have vanished beyond recovery? It, too, must be traceable. And Heinrich dreamed of the time when he would find it.

As quite a boy he was obliged to leave home, and entered the service of a grocer. One evening a drunken miller came into the shop and recited about a hundred lines from Homer, in the original. Heinrich, without understanding a word, was so impressed by the resonance of the verse that he asked the miller to repeat his recital. He did so twice over, being paid by the boy in three glasses of whisky. His one ambition was now to learn Greek, but the opportunity was long delayed. He joined a ship bound for Venezuela, travelled far, and settled at length in Russia, where he made a fortune as army contractor during the Crimean War. Amid all his employment he never forgot his great ambition, nor had his wish to learn Greek been neglected. Not only had he mastered Greek, but five languages besides. He was now at liberty to journey south, and, in 1868, he visited Greece. Crossing to Asia Minor in 1871, he began his search for Troy city. His labours were succeeded by others, and eventually nine cities, six at least of importance, were unearthed. Schliemann mistook the real Troy, and, passing over to the Morean Peninsula, he made further excavations, and brought to light a wonderful civilisation which dated back to far beyond the great days of Agamemnon and Achilles.

* *The Nemesis of Nations.*

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The background of English history with most people seldom causes more than a vague wonder as to the shadowy beings—cave-dwellers, men of the early Stone Age—who first inhabited our island. In like manner few ever think of all that led up to the “Golden Age of Greece.” This is the story that has now been revealed. It was no wild men of the woods who lived in Greece three, four, and even more thousands of years ago. For many centuries their arts and architecture and maritime enterprise placed them among the leading nations of antiquity. The poets and storytellers of historical Greece loved to relate the deeds of the heroes who joined with Menelaus in the siege of Troy. But these were not their direct ancestors. The Athenians of the age of Pericles were descended from invaders of a later date. For years following the discoveries of Schliemann and others in Mycenæ and Tiryns, these ancient cities were thought to have been the centre of this civilisation, but the discoveries of Evans and others in Crete have disclosed even more remarkable evidences of this lost people, and mark Crete itself, and its former capital Knossus, as the fountain head. Minoan civilisation it is called, named after Minos, the famous king, who, while by no means its founder, appears to have been a vigorous and strong ruler. Who has not read the story of the Minotaur and the Labyrinth of Crete? Myth it cannot be altogether called, for the veritable palace of Minos has been found, and a huge underground vault, partially unearthed, has been suggested as the Labyrinth.

That the Minoan people were peaceable and peace loving their art assures us. The horrors of Assyrian pictographs are not found among the motives of the beautiful vases of ancient Crete. Flower gatherers, dancing girls, fresh and happy themes speak of the life they led. Not that these people anticipated the ideal peace principles of the Christian era, or laid themselves open to invasion; the Cretan bowmen were famous warriors, and Minos, whose reign belonged to a late Minoan period, was evidently a king to be feared. That Athens—the Athens of legend—was subject to him we read in the story of Theseus.

The Minoan civilisation extended from isle to isle. New settlements of an industrious people, who became a sea power before the time of the Phœnicians, and possessed a system of writing before that later nationality invented their alphabet, were founded. Upon the coast of Palestine there are evidences that they established themselves, and were known to the Israelites as Philistines—a small but strong colony, successful in curbing the aggressiveness of the Hebrews. Who cannot recognise a resemblance between the individual feats of great warriors on the plain of Troy and the swagger of Goliath of Gath? If these warriors ever lived at all, many of them were of the Minoan race. Idomeneus had care of eighty barques manned by the sons of a hundred Cretan cities. Homer may have indulged occasionally in

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exaggerated flights of song, but his pictures of art and architecture apply with reasonable accuracy to Cretan and Mycenæan times. The pictures of city life, of harvest time, and country festivities, represented on the shield of Achilles, have delighted millions.

Of the origin of this people, as indeed of all people, comparatively little is known. Europe, we learn, was inhabited in far distant ages by men who resembled this race, and even 10,000 B.C. has been named as within the compass of Cretan civilisation.

Let it be noted that if, incidentally, they were warriors, they were not a fighting race. Small of stature, they seem scarcely to correspond with the physique of the great heroes of the *Iliad*.* It was the arts of peace that made them *great* and *enduring*. The warlike instincts which made "flies of men and wildernesses of nations" in Asia Minor, did not seriously afflict them. Their writing is still a sealed book, but modern excavations have brought light into the life they lived.

There was a largely democratic and even strongly socialistic element in their polity. The powerful Minoan monarchy developed eventually into a kind of communism, reverting, in a sense, to primitive conditions. The structure of the royal palaces proves that the court was open to the people. Men, women, and children were all fed at the expense of the state. The public meals of Sparta, in its great days centuries later, seem reminiscent of this; but each Spartan was expected every month to bring his requisite supply of provisions. Aristotle, indeed, credits many Spartan customs to Crete.

The revenue was devoted to three objects: (1) The worship of the gods, (2) public expenditure, (3) public meals. Unlike the socialism of to-day, there was a strong military sentiment, and the overthrow of the monarchy and destruction of the palaces have been attributed to this force. But its relationship to the modern anti-military type may be found by those who care to read a translation of the *Iliad*. There, in the second book, we find, behind Homer's lash of contempt, as thorough a socialist in the person of Thersites as any modern enthusiast could desire.

Lastly—but of immense importance—though these people kept slaves they treated them as human beings.

We cannot reasonably suppose that of necessity the problems which face the civilised powers of to-day existed 5,000 years ago. Clothing and housing in warm countries would not be a continual anxiety. Food was plentiful in the form of abundant and frequent harvests. The strenuous life was not a menace except among ill-treated slaves.

Reasonable leisure, and occupation largely in a ceramic art which was famous everywhere, and a plentiful supply of gold would naturally lead these people to decorate their persons with lavish display. The men of Mycenæ wore necklets of gold, bronze, and

* Possibly warriors were singled out as men of brawn rather than brain.

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precious stones. The garments were spangled with gold leaf. The women wore a chiton—a close-fitting robe down to the waist, falling in flounces below. The cloth was of fine linen, and soft wool coloured purple—a popular dye associated with Tyre, and obtained from a shell-fish found on adjacent shores. According to Schliemann, the women were literally laden with golden jewellery. They fastened their hair with hairpins of gold, silver, and bronze. Diadems of gold adorned their brows. Golden bands circled their throats, and golden necklets fell pendent over their bosoms. Gold bracelets clasped each arm, gold rings, chased and beautiful, shone on the fingers.

The religion was largely a worship of Zeus and Demeter (god of heaven and goddess of the earth).

What came of this great people? Were they destroyed by invaders? It is a recognised fact that invading races in the past have frequently triumphed at the expense of civilisation, and the burned palaces of Mycenæ and Tiryns seem to point to this. But there are evidences, too—at least in Crete—that pestilence swept the people away. We read of a “dreadful plague” coming upon the Grecian forces, in Homer; of the destruction of the Assyrian Army, when—

The angel of death spread his wings on the blast,
And breathed in the face of the foe as he passed.

The “noisome pestilence,” indeed, in hot, unhealthy climates may easily have swept whole nations away. Our own more favoured land, even, has had its Black Death and Plague of London.

GREECE.

Eventually another race appeared, the forerunners of the famous people whose art and culture are still the admiration of the world. It was not suddenly that they overran the country. As in Central Europe, and conducive to a slow development, dense forests covered the land, where wild beasts roamed, which could only be cultivated in the one case and subdued in the other by long-sustained exertion. The people settled in communities, villages grew in importance, and finally the settlement became a state. Thus Attica arose, with Athens as its centre; and thus Laconia, with its capital Sparta. Of Sparta little need be said, but that little is full of import. If the building up of physique is the ideal way of exalting a nation, Sparta was a model. Simplicity of life and hardihood were the chief aims. Weakly children were regarded as a burden, and not suffered to live. Each child was the property of the state. At the age of seven boys were forced to leave home and go into public institutions. Both boys and girls underwent a course of gymnastic exercises. The military courage of Leonidas and his little band at the Pass of Thermopylæ has often been told. Sparta's fame rests in fact on its military régime. *It gave nothing else to the world.* The Spartans became

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the most perfect foot soldiers that Greece ever saw, but they were entirely destitute of refinement or liberal sentiment. They had no arts and no poetry or philosophy. "In the story of Hellas," says J. M. Robertson, "Sparta stands almost alone among peoples as yielding no foothold to the life of the mind, bare of nearly all memory of beauty, indigent in all that belongs to the spirit, morally sterile as steel."

It seems to be a characteristic of little states to be jealous and quarrelsome, and, as Norman Angell has observed, it is not war that has bound them together, but war, and the war spirit, which has *kept them apart*.

And just as the Balkan States are explosive and capricious, so was it with the Greece of ancient history. Not only were the little states for ever quarrelling, but over and over again the ablest generals, statesmen, and philosophers were killed or exiled. As one writer has said, "the Athenians never learned to be just to those who served them, or to distinguish between treachery and errors of judgment."

Although Athens dated back to Minoan days, the Golden Age may be said to have begun about 600 B.C. This was in historical times, and in all directions ample material is available. To trace the careers of rulers and peoples through the succeeding two or three centuries in so limited a space would be impossible. Suffice it that we gain a general impression of the period of greatness and mark the causes of the decline and fall.

The conflict of class interests was early in evidence in Athenian affairs. There were the rich landholders, the merchantmen, and the peasantry, each with ambitions, and two at least with grievances. The struggles of party gave a variety of governments to the people as the years went by. Personal ambitions led to curious anomalies.

There were benevolent tyrants and tyrannical democrats. Some of the greatest law-givers were men of aristocratic birth, whose benevolent motives sprang in part from personal ambition. In no case could it be said that an ideal was reached.

No state or age can ever be said to have stood alone uninfluenced by its own past, or by what has been aptly called "cross fertilisation." Spartan isolation came near to it. Situation contributed to such a condition. This naturally led to the fostering of militarism and the consequent blank in contribution to the world's growth.

On the other hand, Athens was open to all the educative winds of heaven. The Golden Age did not come like an aerolite—it grew like the dawn. If it belonged to the days of Pericles: the statesmanship of Solon, the integrity of Aristides the Just, the generalship of Themistocles and Cimon, the bitter lessons of past failures and the wisdom that came of struggles and compromises all led up to it. The rising of a little nation to defend their

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fatherland, the sinking of petty, inter-state quarrels and internal differences, the co-operation of all classes in the face of the Persian danger, served also to usher in the day.

Pericles was born 499 B.C. In his youth he attended the lectures of Zeno and Anaxagoras, and learned politics from his music master. Plutarch gives an instance of his philosophy and self-control during his maturer years:—

A vile, abandoned fellow loaded him a whole day with reproaches and abuse; he bore it with patience and silence. In the evening he walked slowly home, this impudent wretch following and insulting him all the way. As it was dark when he came to his own door, he ordered one of his servants to take a torch and light the man home.

This dignified demeanour was regarded as due to pride and contempt of others by some, and of these Zeno observed that they would do well to be proud in the same way, so that acting a part might insensibly produce a love of it.

As a young man Pericles, partly, perchance, from modesty, partly from fear of ostracism,* kept himself in the background. His studies under Anaxagoras bore fruit in later days, when his tongue was said to be armed with thunder.

Such was his reverence of the gods that, before speaking in public, he always addressed a prayer to them that not one word might unawares escape him unsuitable to the occasion.

There is no doubt that at the outset Pericles gained his power with the people largely at the expense of Cimon, the great admiral and head of the nobles, whose generousities to the poor did not prevent the success of his rival.†

Cimon suffered banishment, and when Pericles finally recalled him it was to appease the people.

On the death of Cimon, his brother-in-law, Thucydides, was put up against Pericles by the aristocratic party. So severe was the strife that the city was divided into two bitter factions: people and nobles. Pericles now made greater efforts than ever to retain the friendship of his allies. Shows and feasts and processions were frequently arranged. Probably the most popular act of Pericles was the curtailing of the ancient power of the Areopagus (the Athenian House of Lords) and the establishing of the jury

* Exile was the result of ostracism. This singular practice consisted in every citizen at a certain time writing the name of the person he wished to have banished on a piece of broken pot or shell. The highest poll condemned to banishment. When the ostracism of Aristides was proceeding, an ignorant fellow came to him, not knowing who he was, and asked him to write Aristides on his shell. On being asked what injury Aristides had done him, he declared none, but could not bear to hear him everywhere called "the Just."

† Cimon acquired a great fortune in his wars, and what he had gained from the enemy he gave to his fellow-citizens. "He ordered the fences of his fields and gardens to be thrown down, that strangers as well as his own countrymen might freely partake of his fruit. He had supper provided at his house every day, in which the dishes were plain, but sufficient for a multitude of guests. Every poor citizen repaired to it at pleasure."—*Related by Plutarch.*

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courts. This innovation gave the people a new sense of their own importance, and also taught them the wisdom of united action. Six thousand citizens were enrolled as jurors, who decided local disputes or charges, and even affairs of state in the jury courts. The mischief which attended this and other measures was payment for service. Of the tainted source of the funds we shall speak shortly, but the mischief struck deeper in that it encouraged constitutional idlers. The very existence of the courts also fostered class divisions and the spirit of litigation.

The administration of the state was in the hands of the Assembly. The state was divided in ten "tribes," and fifty taken from each formed the Council, which carried out the Assembly's decrees. Each candidate for office had to undergo a public examination as to his character. A president was chosen from every "tribe," and a fresh one was elected daily, every one being paid for service. When we consider the proportion of those in office to a population of some 235,000, as compared with a similar number in a modern house of representatives as against a population of fifty or sixty millions, we may accept the caustic criticism that this was "self-government gone mad."

Although Pericles was dragged frequently into war, and distinguished himself in battle, his was not an aggressive government. How far his own claim could be justified from modern standards may be questioned. A lofty sentiment appears in his words, which modern statesmen might well emulate. As he lay dying, certain citizens, gathered around his bed, discoursed concerning his brilliant acts, civil and military. They thought him unconscious, but presently he said: "I am surprised that while you dwell upon and extol these acts of mine, though fortune had her share in them, and many other generals performed the like, you take no notice of the greatest and most honourable part of my character, that no Athenian *through my means* ever put on mourning."*

The funeral oration ascribed to Pericles, given on the occasion of a naval calamity, conveys so admirable a description of the ideal state aimed at, that portions of it may fittingly find a place in these pages:—

Our institutions are not borrowed from those around us; they are our own, the creation of Athenian statesmen. In political language of the day, we are called a democracy, and the name is true, and not true. It is true, because the administration of our city is in the hands of the people; and there is one law for rich and poor; it is not true, because, above all states, we recognise the claims of excellence. In this sense we are an aristocracy; not of birth, for among us there is no privilege; not of wealth, for poverty is a bar to none; but of merit. . . . Along with this unconstrained liberty goes a spirit of reverence, which pervades every act of our public life; authority is maintained: the laws are obeyed, not from fear of punishment, but from principle; and of all ordinances the most sacred in our eyes are those which

* Related by Plutarch.

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protect the injured, who cannot retaliate; and the unwritten laws, which, though enforced by no legal penalty, bring reproach to the transgressor. . . . We dare to think as well as act; we live for ourselves, while living for the state. With us a love of what is beautiful is consistent with economy. . . . *More than any other nation we have drawn our friends to us by kindly actions, and we have assisted others without hope of advantage.*

Could our italicised words have been surpassed in any defence of a Christian state?

And yet a later criticism deserves mention. Aristotle, who was born 384 B.C., was able to sum up the advantages and disadvantages of the various forms of government, and his conclusions were that, having witnessed the unjust exactions of a democracy, the dwindling population of an oligarchy at Sparta, and the oppressive selfishness of new tyrannies throughout the Greek world, he condemned the constitution of the Greek states. The ideal constitution for him might be either a commonwealth, an aristocracy, or a monarchy directed to the general good; but he preferred the monarchy of one man, pre-eminent in virtue, as the best of all governments.

When opposition was no longer formidable the brilliance of Pericles' administration grew brighter, and the wisdom of his restraining influence over military spirits more conspicuous. In the words of the historian, "he was a man of probity. Money could not bribe him; he was so much above the desire of it that, though he added greatly to the opulence of the state, yet he added not one drachma to his paternal estate." It was his aim that all the citizens should "live in a land of health, amid fair sights and sounds."

It was during the life of Pericles that the city of Athens was destroyed by the Persians; it was in his age that the mighty fleet of Xerxes was defeated at Salamis; and it was under his vigorous leadership that the new and beautiful city rose on the ruins of the old, and extended along the Piræus to the sea.

Let us glance briefly at the daily life and customs of the people.

There was no Spartan discipline in Athens. The lot of the Athenian boy was far happier. Education was private. At the age of six the lad was put under the care of an old slave called *paidagogos*, whose duty it was simply to take him to school or for walks, and keep an eye on his behaviour. The boy learned to sing, to play the lyre, to write from a copy, and to read. Instead of a slate a wax tablet was used, on which letters were scratched with a pointed instrument. Homer was the chief schoolbook, and the mythology of Greece was known to every scholar. Music was no mere *dilettante* pursuit, but had an important place in the ethical development.

Physical training was practised at the wrestling schools under private control. The gymnasia were public institutions, with racecourses and various facilities for adult exercises. Baths were provided, and not to be able to swim was a disgrace equal to

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not knowing the alphabet. Taken altogether, education was conducted with a view to the development of a capable citizen.

Girls seem to have been negligible. The sphere of the Greek woman was the household. Those who were much in public did not enjoy a high moral reputation. The instruction of a girl was therefore very limited. Even the home shopping was conducted by the master of the house. Spinning, sewing, and embroidery were the chief feminine accomplishments.

And how did the little ones amuse themselves? The boys at least could not soil their clothes, since, in summer at all events, they were almost naked. The little girls wore long dresses fastened by ribbons crossing each other.

There were plenty of stories to be told in those days. Æsop was a prime favourite. There were many toys, too, similar to those in vogue to-day. A metal jar filled with stones formed a good, noisy rattle. There were little two-wheeled carts, or a single wheel on a long pole. Boys delighted to drive tame dogs or goats, and little girls played at cooking with earthenware vessels. Dolls, of course, were common, and for the boys there were tops and whips and hoops and ships, while swings were popular with both boys and girls.

Festivals were numerous, from the great Olympic and other "games" to the Eleusinian rites and the Dionysiac orgies. The great tragedies, too, of Æschylus, Euripides, and Sophocles, and the comedies of Aristophanes, who all belonged to the Golden Age, were the common property of the people.

The shopkeeper was held in poor esteem by the Athenians, while agriculture was honoured and practised by rich and poor alike. The breeding of cattle, asses, sheep, and goats was a common industry in the country districts, while the cultivation of the olive was the basis of a considerable foreign oil trade. Foreign trading was by no means on a level with shopkeeping, and the virility of the nation was largely due to their maritime occupation. Their familiarity with the sea gave them their victory over the Persians, who had no knowledge of it. As sea traders the Phœnicians anticipated the Greeks. Pirates to a large extent they were, plundering the islands of the Ægean with impunity until Greece became the deliverer, and piracy gradually sank into disrepute. The seafaring life, as with our own nation, naturally led to a peaceful colonisation.

There is much over which we might pause in the religion of Greece. Just as at a slightly later date the influence of Buddha imperceptibly spread westward, tingeing even the New Testament records, so the religions of other races—Egypt, Assyria, Phœnicia—reappear in Greece. Aphrodite and Adonis were Phœnician, Dionysus (Bacchus of the Romans) was from Asia; the Eleusinian mysteries, which were eventually transformed into sacred Christian ceremonials, are thought to have originated in Egypt. The strange

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sacredness of stones seems to have been identified with all adjacent religions, showing a common source. The word Bethel, which Jacob gave to the stone on which his head had rested, is found in the Greek *Bætyl* (sacred pillar). The dolmens of Carnac in Brittany, the monoliths of Stonehenge, the very temple pillars of all nations seem to indicate a far distant common origin.

The Shiloh of Old Testament history was typical of Grecian oracles.

That the Greeks were a highly religious nation as regards observances, and what we should designate superstitions, their historians amply prove. Their consultations of oracles at times of crisis and their sacrificial rites before entering battle are evidence of this. We have seen, too, how magnanimous they could be, and yet there remained the dark background of slavery and the ever-growing military spirit. Patriotism may easily descend into Chauvinism, and develop a "national purse pride and the vertigo of the higher dunghill." Then follows the pugnacious, grasping policy and the stagnating effects of conquest. This was the story of Athens. Conquerors and conquered in the devastating Peloponnesian civil war, in which Greece was involved for twenty-seven years, alike suffered the Nemesis which could not but attend.

The effects of slavery were less apparent but equally malignant. We are apt to judge ancient people by modern standards, but the horrors of slavery and the slave trade have not yet been wiped out. That there were kind masters in Athens we know; and, although occasional pity was expressed by the great poets, it may be said that, generally speaking, the famous thinkers of Greece supported slavery.

In the days depicted by Homer heroes and princes and princesses delighted in household—what we regard as menial—tasks. Some of the famous leaders of thought and action in early Athens lived in the simplest style and in the humblest of dwellings. But as Athens grew in power, and slaves gradually supplanted free labour (as in Babylon), idleness and luxury and loss of human dignity and virtue inevitably followed. The slave was the machine. He was cheap to buy and a good investment. The state lived on him. The odium which attached to the artisan did not touch the employer of slave labour. The slave population far outnumbered the free men. Scarcely anyone was too poor to own a slave, and six or seven in a household was a modest possession. The number ranged up into hundreds. All the trades of the city were carried on by slaves. The master hired out his slaves as he would his asses.

Athens became the slave market of the Mediterranean, and the buying and selling of human beings added to the callousness of the people. The silver mines of Laurion were owned by the Athenian state, and the profits were used to build the Athenian

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fleet and to pour wealth into the city. Even the new city was built, to some extent, upon the miseries of the slave.

The mines were of vast extent. A ten-hour day—calculated from the burning capacity of the lamps discovered—seems to have been in operation, and the work went on night and day. It has been estimated that 20,000 slaves were employed in the mines. They were chained, and a moment's pause for rest would bring down the overseer's lash. Upwards of two thousand galleries have been found, some of them 400 feet in depth. Even children toiled in these stifling holes. Two years was the average term of life of the slave miner.

Conspiracy was hardly possible, since the cunning taskmasters so arranged it that slaves from different countries worked together.

In the household the stress of labour might not be so continuous, but the slave was only a chattel. His evidence might be required in the law courts, but his bare word could not be trusted, and confession under torture was always required. If the poor victim was permanently injured the *master* received damages.

As the dawn came swiftly, so came the setting; and the downfall of Athens was due in part to the demoralising tributes of dependent states* and in part to the curse of slavery.

ROME.

Behind even the commercial struggles for supremacy in olden days was the spirit—the intrusive spirit—of the warrior; and it is with us still. The “good old rule” sufficed in times past “that they should take who have the power.” It was done openly then; it is done under clever pretexts to-day.

Training in arms, building of ships, and forging of weapons were forced upon the peacefully inclined among ancient states, purely for self-preservation. In recognising this, let the distinction between a purely defensive warfare, such as was waged by the Greeks against Persia, and that of a conqueror like Alexander be noted; and also the tendency, having once been warmed by the tribal, fighting spirit, to its becoming a consuming fire. The history of ancient Rome furnishes its own moral.

In Virgil's great poem, “The Æneid,” the travels of Æneas and those who escaped from burning Troy are told. Arrived on Italian shores, Æneas visits the kingdom of the dead, and there has a vision of their descendants—the future Roman nation which would spring from this Trojan remnant.

Whether Romulus and other less legendary characters ever really lived is unimportant, and whether the Trojans were ancestors of the Romans, if momentarily interesting, is equally so. Early Rome lies in the shadows. Another people of uncertain origin—

* According to Aristotle, nearly the whole of the male population of Athens was supported by tribute.

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the Etruscans—dominated central Italy at one period, and some at least of the Roman kings were of that race. Lars Porsena of Clusium, who figures in Macaulay's "Lays," was a king of the Etruscans, taking up arms to restore the vicious Tarquin, son of the last King of Rome, who had been hounded out of the city. The Etruscans appear to have reached a moderate degree of civilisation. Remains of their architecture and aqueducts are still extant. Italy in those days was mostly covered by forests and marshes, and villages were usually built upon piles. A preference for the seaboard was a wise one, and Greek colonies appeared very early in southern Italy. The city of Tarentum was one of the first and the most important.

Early rivalries between Romans and Etruscans led to wider complications and the eventual absorption of several tribes in the growing Roman power. A sudden invasion of the Celts from the north—a horde of half-naked warriors, who captured and sacked Rome—was responsible for our lack of reliable knowledge. They departed speedily, being too barbaric for a settled life.

After this, dangers from the north were reduced by making military roads and establishing fortified colonies. Trouble in the south and from mountain men (the Samnites) and from the Greek settlements ended in Roman supremacy throughout Italy. One of the earliest roads is known in history as the Flaminian Way. Two others were famous—the Latin Way and the Appian Way. The position of the city had been well chosen—hard to reach, strongly situated—and the character of the people had little of the ebullient imaginativeness of the Greek race. Sturdy cohesion and aptitude to discipline helped to build up a nationality and an empire of enormous power. From the expulsion of the Tarquins to the age of Julius Cæsar—about five centuries—Rome was a republic. The government was chiefly in the hands of the Senate, a select body composed chiefly of military leaders, who had first justified their rule by upholding the honour of the city against "false Sextus." Under the Senate, active government was in the hands of two consuls, who were elected annually. They had supreme power in war and considerable authority in the city, and the right of veto upon each other's judgments.

The survival of Rome was due to successful emergence from many desperate struggles, and it is small wonder that the spirit of conquest and empire eventually dominated her policy.

There was an early division of the people into patricians and plebeians, and the beginning of Roman history is largely a record of their struggles.

Besides the Senate there was the popular assembly, or Lower House, and, later, the Plebeian Assembly. In the year when the monarchy ended (509 B.C.) the "Plebs" were roused into rebellion on account of the drastic laws respecting debtors. "The law of

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debt," says Macaulay, "framed by creditors, and for the protection of creditors, was the most horrible that has ever been known." The rebels were pacified by offered concessions and a persuasive parable, told by a senator, of a quarrel between the belly and the limbs. One of the important recognitions of popular rights was obtained a few years later in the appointing of two tribunes. The contempt of the patrician class for these is well depicted in Shakespeare's *Coriolanus*.

At first two only were chosen, but eventually the number grew to ten. In them was invested the power of protecting the "Plebs" from oppression. The "Plebs'" Assembly, at first only an institution without authority, in time secured a legal status in its decisions.

The basis of many Roman laws and customs was religion. If we call it superstition, at least it may be regarded as sincere, and as intelligent as some of our present-day observances and customs. The word pontiff, as we use it to-day, has its origin in the office of the Pontifex Maximus of early Rome, whose official residence was by the Tiber; and that dated back to the time when migratory tribes reached river banks in days when every river was sacred to its deity, and a special religious ceremonial was required ere a bridge could be thrown across.

The consulting of omens was at first a natural act of observation. Foretelling the weather by flights of birds developed into the fantastical observations of the *auspicium*.

The wandering tribes, ere they settled in some fertile spot, would examine the entrails of indigenous animals to guide them in their conclusions as to the salutary conditions of the climate and soil. This developed into a board of *Augurs*, who discovered the will of the gods by these methods.

The transmission of religious ideas came naturally with commercial contact, and the tracing of European theocracies to the East is a study of great interest. But some also give evidence of racial succession, or close affinity. Thus the *lares* and *penates* of the Roman household carry us naturally back to the "wonderful guest" of the Aryans, who first invaded Hindustan. There is an approximation in these conceptions appreciably near to the highest of Christian ideals. Every respectable Roman home was a temple. In it resided the departed spirits of ancestors. There was a sacred centre in each house, where the ancestral images were kept, and here the family gathered daily for prayer. There was a recognised guardianship on the part of good spirits known as *manes*. Domestic and public ancestry were included in the *lares* and *penates*. At some funerals images of ancestors were carried to the grave, and their deeds recited to rouse the spirit of emulation in the young.

One peculiarity of Roman law was that for many centuries there was no jurisdiction over private life. A man was supreme in his

own house. Religious institutions authorised it. He was entitled to punish his own children by death or slavery if so willed. But until the later days of the empire life in Rome had many charms. The birth of a boy was a time for rejoicing. A religious festival was held. A curious superstition was observed in the hanging round the child's neck of a gilded disc—or a leather one in poor houses—as a charm against the evil eye.

For seven years the mother had the child's training in her own hands, and it is interesting to note the contrast between the sex's position in Rome and in Athens. For an Athenian woman to intrude into public life was to acquire an unenviable notoriety. The Roman mother enjoyed a wider sphere of influence. The historical episode in Shakespeare's *Coriolanus*, where Volumnia visits the Volscian camp to plead with her son, represents a true Roman mother.

At seven years of age the boy left the maternal control. His wider education began. He was trained in swimming, riding, throwing the javelin. He was taught to be modest, obedient, and respectful to elders, and reverential to the gods.

Wherever there are children there must be toys. Many of these, like our own English toys, were constructed to teach as well as amuse. Some of these, after the conquest of Greece and the adoption of Athenian schoolmasters, would probably be of Grecian origin. Big letters of ivory were in vogue with which the child learned to read. Writing was learned in somewhat the same fashion as in Athens. If the English boy is oppressed with arithmetic problems, what must it have been in Rome? The simplest of our sums would become alarming with Roman numerals. To multiply 88 by 8 would be figured thus: LXXXVIII. $\times$ VIII.

Grammar was an important part of the curriculum. Literature involved, as time went by, the growing collection of Roman poets, and also Homer and Æsop. As with numerals so with Roman letters—all were in capitals, the words running together; learning to read must have been a formidable task.

It is interesting to note that some schoolmasters were given their freedom and paid large salaries.

Not only did famous citizens learn from slaves, but sometimes at their receptions learned men would be specially engaged to discourse on various subjects, and the lord of the feast took unction to himself for their wisdom.

But what of the common people—free citizens? Alas! their freedom was little more than the licence of the soldier. We may admire the rites and beliefs of the Roman family, and accept the statement in a qualified way that therein lay the strength of Rome, but when we turn to the humbler ranks we find the poor were excluded. Ancestry did not belong to them, nor *lares* and *penates* in any private sense. The protection of guardian spirits belonged to the man of property.

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The evolution of property ownership in Rome was no fortuitous affair. Early migrations, settlements, communal ownerships, appropriation of land: this stereotyped order had been the experience of Rome. The land question always and everywhere in the world's history has been a *casus belli*, internal or external. It was one of the problems of ancient Rome, and her solution of it contributed to her downfall.

It has been suggested that the long-sustained struggle with Carthage (the flourishing Phœnician colony), known as the Punic Wars, was the turning point for evil in the history of Rome. From that date the aggressive spirit became predominant—the evil genius of the state. The Senate, once noble and trustworthy, became a den of thieves, “experts, specialists of war and empire.” Honest, free industry was gradually superseded, and the freeman, the victim of rich moneylenders, was often sold into slavery himself.

“Rome,” declared Augustine, “had never been a republic at all, because justice had no place in it.” Public land was by degrees fraudulently appropriated. The old upright Roman character that had been built up in agricultural industry was now dragged at the heels of patrician overlords, and the spirit of defence debased into one of defiance and conquest.

Henceforth there was a fearful increase in internal corruption, immorality, bribery, and insatiable eagerness for riches, disregarding everything else and impudently setting aside laws, orders of the Senate, and legal proceedings, making war unauthorised, celebrating triumphs without permission, plundering the provinces, robbing the allies.*

In the reign of militarism, when Roman soldier adventurers ravaged the civilised world, the cattle raids of early warfare were transformed into demands for tribute. For four or five centuries the Romans were maintained by the violent spoliation of the world's wealth.

Slave labour of patrician landholders was devoted to the cultivation of the olive and the vine, and cattle-breeding took the place of corn-growing. Increasing poverty was met by the free distribution of corn, taken as tribute, or bought at conquerors' prices in corn-producing states. The unprofitable growing of corn in Italy gradually depopulated the land. Free food in Rome brought a demoralised crowd into the city; and when similar distribution took place in other Italian towns the demoralisation was only intensified. Never could any tyranny have been termed parasitical more appropriately than that of Rome. Corn, being the chief product of several countries, their tribute was largely paid in kind. If paid in gold the money had to be devoted to the purchase of foreign food.

In the second century B.C. the two brothers Gracchi—the famous “jewels,” in their childhood, of their mother Cornelia—were born. The names of these brothers stand out as the land reformers of Roman history. The problem of poverty and

* Teuffel, *History of Roman Literature*.

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agricultural depression appealed to the elder brother, Tiberius, who threw himself with energy into the passing of what has been called a Small Holdings Act. So eager was he to force the bill through that he broke the laws in the attempt. This provided the opportunity to his enemies, and he was slain on the Capitol, the people for whom he had struggled making no effort to save him.

Nine years later, Caius, the younger brother, was elected Tribune, and carried forward the work Tiberius had begun. He has been described as a "Roman statesman of the highest order, a gentleman in the best and noblest sense." But the efforts of one man, however courageous and sagacious, could not curb the reactionary forces of vested interests, nor lift a degraded people out of the mire. There was a millstone round the neck of Rome slowly strangling the nation. Caius Gracchus was also murdered by his enemies.

How easy it is for the thoughtful mind to trace the devastating effects of the imperial spirit below the glitter of conquest. The almost voiceless suffering that lay beneath is revealed. The aspirations of the democracy were frustrated, and the very gains of the victor contributed to their undoing. Not indeed to theirs alone. The curse fell on all. Wealth accumulated and men decayed in all ranks. Among the patrician classes it contributed to a voluntary plunge into gross excesses.

In the first century B.C. Rome was absolutely a military empire. Soldier adventurers such as Cæsar, Pompey, and Sulla dominated its destinies. Faction ran mad. Deeds which might be paralleled by the massacre of St. Bartholomew were recorded. In the absence of Sulla on one of his expeditions his enemies took the opportunity of putting to death more than a thousand nobles and fifty senators of his party. When Sulla returned with an army, enriched with spoils, he exacted a fearful retribution. Not only the participants in the slaughter were proscribed. Their sons and grandsons, those who sheltered them, those who were denounced by traitors, fell at the hands of hired assassins. "There was not a single temple," says Plutarch, "not a house but was polluted with blood. Husbands were slaughtered in the arms of their wives, and sons in the arms of their mothers, while numbers were put out of the way for the sake of their property."

And through all these calamities the "Plebs" were inevitable sufferers. Their ranks were decimated by continuous wars until, of necessity, a mercenary soldiery had to take their place.

But beyond and outside this were the vast hosts of slaves. Except in respect of climate the lot of the Roman slaves must have been almost as terrible as in Babylon. The wars of Rome were chiefly undertaken for plunder in the shape of gold or slaves. Wherever unharried countries offered scope for putting off the approaching Nemesis it was eagerly seized. Internecine struggles in the early days brought many thousands of slaves of the same

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Latin race into Rome. As war extended a tremendous slave market developed. "Slave merchants followed the armies, and sales on the battlefield were superintended by the military questors who represented the state,"* for the state drew a vast revenue from a slave tax. If the supply exceeded the demand the price fell proportionately. On one occasion the prisoners brought only the equivalent of four francs apiece. Cæsar's campaigns were chiefly in quest of slaves. After one victory in Gaul he sold as many as 53,000, and the victories of every great general produced fresh relays. In addition to Roman conquests, private slavers crowded the Mediterranean and found a ready market in Italy. Besides taxation the slave trade was under state protection. Fraud and concealment were punishable, and contracts might be cancelled up to a year after purchase if physical defects appeared in the slave.

The architectural remains of Rome are relics of slave labour.

Her colossal public buildings recalled the great structures of Babylon. . . . The Circus Maximus accommodated 285,000 spectators. In her vast public warehouses she was able to store millions of bushels of grain. . . . The Forum of Augustus, with its façades of dazzling white marble, was doubtless a noble structure, but the Forum of Trajan was conceived on a grander scale. In order merely to prepare its site, the ridge of rock which connected the Capitol and the Quirinal was removed by the labour of thousands of slaves.*

The great aqueducts, some of which extended sixty miles, were the work of slaves, and in the construction of the buildings the preparation of the material, the slavery of the empire was involved. Marble columns were quarried and shaped by slaves in tributary states, brought overseas by slaves in ships built and manned by slaves.

There is a contrast which may well be made between the inadequately paid labourer of to-day and the unpaid slave of Rome. *Underpaid* labour may be replaced, but to underfeed a slave who had been purchased like a horse was at least impolitic.

The skill of the slave naturally regulated his market price, in which buyer and seller alone reaped gain. But a skilled slave was worth a good sum, and it was to his master's interest to feed him properly. In many cases no doubt this would apply, but unrestrained impulse seldom listens to reason, and even the valuable slave might be killed in a moment of temper with absolute impunity. For the unskilled, in a teeming slave market, the reader may picture the fates which daily threatened. In many houses an array of fiendish instruments of torture were kept, and these were used upon the most trifling occasions. The tongue of the talkative might be cut off, the eyes of another torn out, a recaptured runaway might have his legs broken, and interference there could be none. Crucifixions were common.

The wealthy Roman possessed, in some cases, thousands of slaves. Every possible post was filled by slaves. A slave was

* *The Nemesis of Nations.*

chained to the door of the house to admit guests. Slaves cooked and served up the feasts and poured out the slave-made wine; slaves provided music and song, taught children, copied manuscripts. The arts and culture of Greece were at the command of the conquerors. The master aped the Assyrian tyrants. Slaves fanned him, tasted his food, and whisked the flies from his lordly brow. Slaves wove his cloth and his linen, made his furniture and crockery. It has been estimated by Gibbon that over the empire during the reign of Claudius there were 60 millions of slaves, and even in Rome, with a population of just over 300,000 freemen, there were nearly a million slaves. Not alone were the splendid buildings of Rome erected by slaves; not alone as servitors did they enter the baths, restaurants, reading-rooms, and promenades; contrasting daily, as many of them must have done, their own unhappy lot with that of these self-indulgent citizens; but, crowning mockery and shame of all, it was from their ranks that the amusements of the amphitheatre were supplied. Thousands of gladiators perished in the arena every year, hired out by their masters, who, in case of death, received their due compensation.

A sad commentary on the condition of Imperial Rome was discovered in the opening out of an ancient cemetery. A vast pit was found therein, a thousand feet in length and three hundred deep. This was the city tip, where dead slaves, dead dogs, and all manner of refuse were thrown.

The same reason operated against rebellion in Rome as in Athens. Slaves of different nationalities worked side by side, often animated by bitter race hatreds towards each other. And yet, with a vast slave population, there was always a danger and the fear of revolt. In the year 73 B.C. began the great outbreak under Spartacus. At first a Roman auxiliary, he deserted and became a bandit. He was captured and sent to a training school for gladiators. A man of resource and leadership, he persuaded a band of gladiators into rebellion. Fighting their way to freedom they found refuge in the crater of Vesuvius. Other slaves joined them, and a force of 3,000 soldiers sent against them was defeated. A proclamation of freedom for slaves was sent out, and quickly a rebel army of 70,000 gathered, and again the Romans were overpowered. For two years, with the aid of Gallic allies, the existence of Rome was threatened, but at a critical moment, when marching on the city, 30,000 Gauls, for some unexplained reason, forsook his standard. Escape to the Alps was still possible, but the slave army refused to go. In the final battle Spartacus was slain, and the recaptured slaves in thousands were massacred in cold blood.

We may not trace further the decay of Rome, of which we have but seen the beginning, nor dwell upon the brave efforts of Trajan and the Antonines to stem the downfall. Eventually, in the fifth century A.D., a disunited empire and a succession of barbaric

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invasions, repelled with difficulty, found Rome too feeble to withstand the Vandals, who, swarming in from the south, conquered the "eternal city," and made burlesques of its sacred institutions. Says Gibbon:—

The decline of Rome was the natural and inevitable effect of immoderate greatness. Prosperity ripened the principles of decay; the causes of destruction multiplied with the extent of conquest; and as soon as time or accident had removed the artificial supports the stupendous fabric yielded to the pressure of its own weight. The story of its ruin is simple and obvious; and instead of inquiring *why* the Roman Empire was destroyed, we should rather be surprised that it subsisted so long.

It may well be argued in justification of the policies of ancient empires that no other course had any appeal. The *lex talionis*, even for the greatest thinkers, was the only rational one. The right of superior strength was Nature's object-lesson. It might even be urged that lower intelligences are not subject to the extremes of suffering and emotion that belong to the more highly cultured. Moreover, the spread of Christianity was only synchronous with the decline of the empire, and the education of conscience in Christian ethics is tardy. In spite of all, there emerges the fact that the humanities cannot be abused with impunity, and that what a nation sows it must reap. For us to-day, heirs of the ages, many parallels and many dissimilarities between old and new appear. It would be foolish to deny that Rome gave much to the world. So did Babylon. But the best that Rome gave was her laws, her language, and her literature, and these were not contingent upon her imperialism. Her iron hand in conquered lands must have crushed down far more than it lifted. Her military roads are among the few useful legacies that her material power has left us, and we may wisely ponder the lesson that "the things that are most excellent" have no dependence on mere material magnitude." Finally, we may learn that divided interests in a state tend to disaster, and wealth and luxury founded upon injustice must eventuate in ruin. If we still deplore ignorance and apathy, deplore reactions into a wild, unreasoning war spirit, the *vox populi* is growing louder, more intelligent, and more insistent, and gives promise of emancipation from the thralldom of militarism and plutocracy.



The Cost of Living:

The Co-operative Movement and its Mission.

BY H. CLEMENT GRAY.

INTRODUCTION.

THE subject embraced by the title of this article is so wide, so far-reaching, and the possibilities so great, that to do full justice to it would necessitate the writing of a book. In a comparatively short article, such as this must necessarily be, one must be brief and to the point, and yet, at the same time, endeavour to include as much useful matter as possible in the limited space at one's disposal.

The writer of an article of this nature cannot, and does not, claim to cover all the ground, but he can indicate the lines upon which he thinks this great co-operative movement might proceed in order that the consumer may reap to the full the advantages to be derived from combination.

The continuous rise in the prices of commodities, more particularly in relation to those articles which are in every-day use, and the methods which might be adopted as a means of counteracting the effect which such increase has upon the working classes is a matter which should receive the most careful consideration of those who form part of the co-operative community. The co-operative movement, with all its immense purchasing power, does not appear to have that controlling influence in regard to the fixing of prices which, by the magnitude of its trade, it ought to have, and it is the aim of this article to point out a way whereby this may be accomplished.

Without further preliminaries I propose to go straight to the heart of the subject, and, to avoid possible confusion, to divide the paper into two parts. In the first part I shall show how prices have increased during recent years, and point out some of the principal causes which have brought about this increase; and, in the second part, endeavour to suggest a remedy by means of which, through collective trading, the consumer may work out his own salvation.

I. THE INCREASED COST OF LIVING.

During recent years prices—and we will deal more particularly with the price of foodstuffs as more nearly affecting us as consumers—have steadily been rising. One has only to refer to the report published by the Board of Trade to find that meat, bacon, flour,

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bread, coal, wearing apparel, and rent have increased to a great extent during the last decade. The report is interesting reading, but one is appalled to find that during the fifteen years from 1896 to 1912 retail food supplies rose about 25 per cent., which is 5s. in the £.

The Board of Trade special inquiry, however, deals more particularly with the period from 1905 to 1912, and extends to the conditions existing in eighty-eight towns. It shows that the cost of living, as represented by rents (including rates) and the retail prices of the selected articles of food and coal, was between 11 and 12 per cent. higher in London than in the other eighty-seven towns investigated, taken as a whole. In this respect the Scottish towns come next, and at the other end of the scale are the towns in the Midlands, in which both rents and prices were at a low average comparatively. With the exception of a few towns, notably Coventry and Macclesfield, rents show little increase over 1905. In London rents have fallen by about 4 per cent., although they still remain much higher for the same accommodation than in any other town in this country. The general level of prices of food and coal in the different towns showed a greater degree of uniformity than rents. The amount of the advance between October, 1905, and October, 1912, has, however, been much greater in some towns than in others, varying from 7 per cent. at Portsmouth to 20 per cent. at Stockport. The percentage changes between 1905 and 1912 in the eighty-eight towns where inquiry has been made are as follows:—

	Increase per cent.
Rents	1·8
Retail Prices of Food and Coal	13·7
Rents and Retail Prices Combined	11·3

These figures relate only to rents (including rates) and the retail prices of the principal articles of food and coal.

An attempt was made to ascertain the course of prices of clothing during the years referred to, but this part of the inquiry was beset with special difficulties. From the information obtained, however, the conclusion was arrived at that there had been a rise in the cost of clothing, probably not much less in proportion than that of food and clothing combined, the rise taking the form either of increased price or of inferior quality. The general result of the inquiry shows that while rents have on the average changed very little in the seven years under review, the retail prices of articles of workmen's consumption have greatly increased during the same period, and that probably the average increase during the period in the cost of workmen's rent, food, fuel, and clothing taken together may be put at about 10 per cent., or 2s. in the £.*

How hardly this hits the low wage-earner, where every shilling is of vital importance, may be imagined.

...* Board of Trade Labour Gazette.

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In an excellent series of articles which appeared in the *Daily News* some time ago, Mr. Chiozza Money gives the following table as to how wages and prices have moved in the period embraced by the years from 1895 to 1910, viz. :—

Year.	Wages Index Number.	Wholesale Prices Index Number.	London Retail Prices Index Number.
1895	89.1	91.0	93.2
1896	89.9	88.2	92.0
1897	90.8	90.1	96.2
1898	93.2	93.2	100.8
1899	95.4	92.3	96.4
1900	100.0	100.0	100.0
1901	99.1	96.9	101.9
1902	97.8	96.5	101.6
1903	97.2	96.9	103.2
1904	96.7	98.3	104.3
1905	97.0	97.6	103.7
1906	98.4	100.5	103.2
1907	101.8	105.7	105.8
1908	101.2	102.8	108.4
1909	100.0	104.0	108.2
1910	100.2	108.8	109.9
	Inc. per cent.	Inc. per cent.	Inc. per cent.
Movement in 15 years	12.4	19.5	17.9

Mr. Chiozza Money comments on these figures as follows :—

The first column, taking the year 1900 as a standard, shows the wages of the other years named expressed as a percentage of those of 1900 for the following group of trades: building, coal-mining, engineering, textile trades, and agriculture. The second column shows in similar fashion the movement of wholesale prices. The third column shows the movement of London retail food prices. It will be seen that in fifteen years, while wages have risen little more than 12 per cent., food prices have risen by nearly 18 per cent., which means that *real wages have actually fallen in the last fifteen years*. Next observe what has happened since 1900. In that period *wages have been almost stationary, while prices have advanced about 10 per cent.*

Let us pause for one moment and compare the position of the worker in the year 1905 with the year 1912. We can only take the figures relating to the trades selected for the Board of Trade inquiry, but they will serve as an illustration. We have seen that the cost of living has during the past seven years increased by 10 per cent., i.e., 2s. in the £. On the other hand, the following are the mean percentages of advances in wages in the specified trades, viz. :—

	Skilled.	Unskilled.
Building.....	1.9	2.6
Engineering	5.5	3.9
Compositors	4.1	

These percentages are the average rates of increase. In some towns the increase has been greater than in others, and again in

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some districts there has been no change at all. It will be seen, however, that in no case does the advance in wages compensate the increase in the cost of living. This proves conclusively that the workman is in a worse position now than he was in 1905.

An interesting piece of evidence as to the increase in the cost of living has been published by the Co-operative Wholesale Society, which has worked out an average weekly family order on various dates from 1898 to 1913. The average order consists of 1lb. of bacon, 2lbs. of butter, $\frac{1}{2}$ lb. of cheese, 12lbs. of flour, $\frac{1}{2}$ lb. of lard, 1lb. of meal, 4lbs. of sugar, $\frac{1}{2}$ lb. of tea. The prices are calculated on a wholesale basis, but the rise in retail prices of these articles has been on the whole quite as great as in the wholesale rates. It is calculated that the above goods cost the purchaser as follows on the dates named, viz. :—

Year.	Pence.
1898.....	63·85
1906.....	67·28
1908.....	70·21
1910.....	72·38
1911.....	71·00
1912.....	74·28
1913.....	72·54

This shows an increased cost for 1906 over 1898 of 5·37 per cent., 1908 over 1898 of 9·95 per cent., 1910 over 1898 of 13·36 per cent., 1911 over 1898 of 11·20 per cent., 1912 over 1898 of 16·33 per cent., and a decrease for 1913 on 1912 of 2·46 per cent. At the time of writing the figures for 1914 are not yet published, but by the courtesy of the C.W.S. I am able to give a comparison between the years ended June, 1913, and June, 1914, which is the latest information available. From these figures it would appear that the slight decrease in cost which took place in 1913 is likely to be repeated in 1914. The cost of the 21 $\frac{1}{2}$ lbs. of goods previously referred to for the year ended June, 1913, was 73·08 pence, whereas the same articles could be purchased during the year ended June, 1914, for 71·36 pence, a decrease of 1·72 pence, or 2·40 per cent., when compared with the year previous. The average price of coal also has considerably increased. The following are the average prices of coal at the pit mouth :—

1898.	1906.	1908.	1910.	1911.	1912.	1913.
Per ton. s. d. 9 11 $\frac{1}{2}$	Per ton. s. d. 10 9	Per ton. s. d. 13 3	Per ton. s. d. 13 3	Per ton. s. d. 13 3	Per ton. s. d. 14 9	Per ton. s. d. 15 9

showing an increased cost for 1906 over 1898 of 7·95 per cent., 1908, 1910, and 1911 over 1898 of 33·05 per cent., 1912 over 1898 of 48·12 per cent., and 1913 over 1898 of 58·16 per cent.

This statement, coming from such a source, shows at a glance how and to what extent the increase in prices has affected the

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working-class consumer, as the bulk of the trade done by the co-operative movement is with the working classes.

The increased cost of living is not confined to this country alone; in fact, in most other countries of which we have statistics the rise has been greater than with us. All available statistics go to prove that this tendency to advance prices is world-wide and general, and is not confined to any particular country or to any particular commodity. The causes for this increase are many and varied.

GOLD PRODUCTION.

The increase in the output of gold is one of the theories advanced by those who have made a study of the question, although in the opinion of some experts this is not the dominating factor which it is popularly supposed to be. The following figures, extracted from *The Statist*, relating to the world's gold production will be interesting, viz. :—

	£		£
1860	23,850,000	1890	24,260,000
1865	24,040,000	1895	40,842,000
1870	21,370,000	1900	52,311,000
1875	22,700,000	1905	78,143,000
1880	22,130,000	1910	96,225,000
1885	21,250,000	1913	*94,720,000

*Preliminary estimate.

It will be seen from these figures that since the year 1895 the output of gold has increased from £40,842,000 to £94,720,000 annually. When we take into account that since 1896 prices have been continually on the upward grade, it seems reasonable to suggest that the gold supply, seeing that our prices are measured in gold, has some bearing on the subject, as the cheaper money is (gold being the standard of currency generally adopted) the higher in price are those articles which money will purchase. Gold production has increased enormously, with consequent depreciation in its value as a purchasing medium. Not only gold, but the increase in paper money, such as cheques, bills of exchange, and other means of credit, must be taken into account in arriving at the total value of the currency and its effect on prices. However, it would be absurd to make the statement that the increase in the gold supply is responsible for the whole, or even the main part, of the recent rise in prices, for this reason, that although the cost of almost every commodity has risen to some extent there is a great variation in the amount of the rise. If the gold supply were the dominant factor, then it would follow that there would be an all-round rise of practically equal proportions, which is not the case.

In regard to the effect of currency on prices, the increase in the volume of trade has also to be reckoned with, as this of course tends to counteract its effect. The volume of trade has of course greatly increased, and a large proportion of the increased currency

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has been required to cope with it. Then, again, other countries have recently adopted the gold standard of currency, and the consequent absorption of gold in the development of new countries helps to counteract the influence of the increase in production of that commodity on prices. The increase in gold and credits certainly appears to be one of the causes of increased prices, although to what extent cannot be definitely stated; but there are numerous other causes at work which have to be carefully considered in order to arrive at a proper understanding of the question. For instance,

INCREASED CONSUMPTION

owing to the advance of civilisation, and the adoption of Western standards of ideas and method of living in the East. The Eastern races are waking up, and are no longer satisfied with what sufficed for their forefathers. Articles of food which, until recently, they had no use for are now being imported in large quantities. Their imports of cotton, leather, and other goods are also largely on the increase, and with their immense population this fact is bound to have an effect upon the prices of those articles, and as the price of one commodity is so closely bound up with the price of another, the result is a general increase all round. Machinery is being imported in large quantities into India, China, and Japan. Factories are being established in these and other countries. Machinery is being laid down in order that they may manufacture their own requirements. Hence there will be a greater demand for raw material, which, unless such raw material is produced in greater quantity, will naturally enhance the price. Then, of course, there is the

INCREASE IN WAGES

to take into account. This is bound to react on prices. As the result of a strike, or from other causes, an employer increases the wages of his employés, but in the majority of cases this increase, although he is compelled to pay it, does not come out of the employer's own pocket. He immediately puts up the price of the particular commodity which he manufactures, as, of course, when costing the article he always takes into consideration the expense he has been put to in producing that article, and the amount paid in wages is included in the cost of production; therefore, as prices react upon the prices of other articles, the consumer has to pay in the long run. Moreover, the manufacturer will not be content with merely increasing the price of the article he produces by just the proportionate amount of the increase in wages which he has to pay; he will, and probably does, put on a little more to compensate himself for the trouble to which he has been put. It can be seen at once what an anomalous position the worker is in. The worker is also the consumer, but sometimes he apparently does not realise

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this; and, although he obtains an increase in his wages, he derives little or no benefit therefrom, because the spending power of his wages being decreased owing to the advance in prices consequent upon increased wages, the benefit of the increase is taken from him in his capacity as consumer. It is simply a case of giving with the one hand and taking away with the other. And so it goes on. The worker is exploited by the capitalist in every way, but in the main he either cannot see it or the spirit of *laissez faire* has so got hold of him that he is not inclined to trouble his head about the matter. It is for the worker to wake up and realise his responsibilities. He must combine as consumer also, and get into his own hands the control of production and the sources of supply before he can hope to obtain a fair share of the wealth he helps to create. Then we have the law of

SUPPLY AND DEMAND.

Upon the extent of production of a particular commodity depends the price of that commodity, and not only that, but the price of other commodities as well. Take, for instance, bacon. It is a well-known fact that in America the farmers restrict the breeding of pigs according to the maize crop. If the maize crop is poor the breeding of pigs is limited, and consequently bacon, ham, and other hog products are dearer. Following upon this point, if we study the question minutely we find, the various commodities being closely interwoven one with another, that any variation in the price of one affects the others to a certain extent. We have only to refer back to the coal strike of 1911 to find an illustration of this fact. Owing to the shortage of coal due to the strike, manufacturers who depended upon that commodity in the process of manufacture increased their prices to make up for the additional expense of production, and, as a result, so closely connected are the things necessary to life, abnormal prices ruled for a time even for commodities which at first sight would appear to be as far removed from coal as are the two poles asunder. The restricted transport facilities due to the shortage of coal also had an effect in increasing the prices of commodities owing to the increase of demand over supply.

The United States has in the past exported large quantities of foodstuffs to this and other European countries, but our supplies from this source are gradually diminishing, the wheat exported from that country in 1910 being 87 million bushels, as compared with 235 million in 1902. Corn exports show a similar decline, the total for 1910 being but 38 million bushels, which is less than at any time in the last dozen years except 1902 and 1909. Exports of meats and food animals show an equally marked decline, those of meat and dairy products having been in 1910 but 131 million dollars, against 211 million in 1906, and those of cattle 12 million dollars, against 42 million dollars in 1906.

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As regards the supply of wheat, we are not altogether dependent upon the United States. A great amount of wheat is grown in Russia, France, India, and other countries; but as regards corn, four-fifths of the world's produce is grown in the States. The following tables relating to the world's production of wheat and corn will show the position at a glance:—

WHEAT.

COUNTRY.	AREA.		PRODUCTION.	
	1913.	1912.	1913.	1912.
	Acres.	Acres.	Bushels.	Bushels.
United States	50,184,000	45,814,000	763,380,000	730,267,000
Russia in Europe	62,070,000	60,666,000	837,787,000	623,761,000
Russia in Asia ...	13,103,000	10,729,000	138,003,000	103,270,000
France	16,170,000	16,239,000	322,731,000	334,342,000
Canada	11,015,000	10,997,000	231,717,000	224,159,000
India	29,569,000	31,141,000	358,389,000	370,514,000
Italy.....	11,842,000	11,751,000	214,407,000	165,721,000
Germany	4,878,000	4,759,000	171,077,000	160,226,000
Great Britain and Ireland	1,790,000	1,971,000	56,691,000	57,402,000
Australia .....	.....	.....	103,776,000	89,232,000
Argentina .....	.....	.....	144,000,000	198,400,000
Totals.....	*200,621,000	194,067,000	3,341,958,000	3,057,294,000
Total other Countries	*30,689,000	33,608,000	578,746,000	612,858,000
World's Total	*231,310,000	227,675,000	3,920,704,000	3,670,152,000

* These figures do not represent the total acreage under wheat, as some of the countries have not made a return of the acreage to the International Agricultural Institute, from whose report these figures are culled.

CORN.

COUNTRY.	AREA.		PRODUCTION.	
	1913.	1912.	1913.	1912.
	Acres.	Acres.	Bushels.	Bushels.
United States	105,820,000	107,083,000	2,446,988,000	3,124,746,000
Hungary.....	6,422,000	6,023,000	184,755,000	176,695,000
Italy.....	3,954,000	3,938,000	108,263,000	98,669,000
Roumania	5,305,000	5,138,000	118,105,000	111,012,000
Russia.....	4,216,000	4,054,000	72,795,000	79,607,000
Egypt.....	1,695,000	1,668,000	57,574,000	60,858,000
Totals.....	127,412,000	127,904,000	2,988,480,000	3,651,587,000
Total other Countries	2,313,000	2,406,000	59,107,000	61,543,000
World's Total	129,725,000	130,310,000	3,047,587,000	3,713,130,000

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The population of the large cities and manufacturing centres of America has increased to an enormous extent during recent years, and the production of foodstuffs in that country has not kept pace with this increase. The population of America is now over 100 millions, and the percentage of non-producers, as far as foodstuffs are concerned, is much larger than it was, and is continually increasing. The agricultural returns do not show a corresponding expansion, hence the quantity available for exportation grows less and less each year.

During the past few years there has been great prosperity in America, and the people of that country—like the people here—have acquired a higher standard of living, and consume more flesh meat than formerly. The consumption of meat has increased enormously, and this fact has caused prices to rise considerably, and a demand has been created for pork, &c., out of all proportion to what it was. Then the packer finds he can get a very high price in America, and unless he can get a correspondingly high price in this country he finds it better to sell his products at home, and cuts down our supplies accordingly. As a matter of fact, the quantity of hog products exported from America is about half of what it was twenty-five years ago, and her exports of cheese and butter are practically *nil*.

It may be taken for granted that in the future the United Kingdom will be no more able to rely upon America for beef than she can for wheat.

Mr. O. P. Austin, of the U.S.A. Bureau of Labour and Commerce, attributes the advance in prices of meats to the great corporations which slaughter and prepare for use the bulk of the food animals, and also to the partial transformation of the great stock ranges of the West into farms, and the consequent transfer of the live stock industry from the range to the farm, which has increased the cost of production of the marketable food animal simultaneously with a reduction in the available supply of such animals.

At present we have to rely chiefly upon Denmark for our supplies of bacon, eggs, and butter, but when we consider the rapidly increasing population of other European countries, we are bound to come to the conclusion that eventually we shall have to look elsewhere. From Canada we used formerly to obtain considerable quantities of bacon and butter; now she uses all her own butter, practically all her production of bacon, and although at the present time she is able to send us a considerable quantity of cheese, this is a diminishing quantity, and the chances are that within the next ten years or so Canada will not ship any dairy produce to this country. This can hardly be surprising when we take into account the enormous number of

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people of all nationalities who are emigrating to that country every year. Of course, Australia and New Zealand are dairy countries, and steps are being taken in both colonies to increase the output of dairy produce.

There is a great opportunity for Ireland in this direction if only a definite policy could be settled in that country. We have seen what has happened in Denmark within such an incredibly short space of time by means of organised agriculture. The conditions there were not so favourable as they are in Ireland, the land was not so fertile, nor did they possess the natural advantages of climate, &c., which Ireland has; yet by perseverance and industry the Danes have made themselves the talk of the world. Why cannot Ireland, with her splendid fertile soil and all her other natural advantages which are there already to hand, emulate Denmark in this respect? It is to be hoped the Irish farmer will find it to his advantage to look the question seriously in the face, and that strenuous efforts will be put forth to endeavour to make the Emerald Isle the agricultural country which it was by its natural advantages intended to be. The Irish farmer has, of course, been considerably handicapped in the past owing to want of capital and to other conditions, but, with the help of the development grant, which has been instituted by a wise Government for the organisation of the agricultural industry, and with the assistance of the credit societies which are already in existence and which are now being established, let us hope a brighter dawn is breaking. If by this means the rural depopulation of Ireland caused by emigration can be checked, by finding work, under proper conditions, for the agricultural labourer, who can say what a glorious future is in store for that country?

Cereals, such as wheat, oats, meal, &c., could not of course be grown in the British Isles in quantities large enough to feed the millions of people in this country, and for these necessities we are bound to depend to a large extent upon outside assistance. The rise in these commodities has been largely brought about by increased consumption, which in turn is the result of the rise in the standard of life in all civilised countries. There is a greater demand upon the limited supplies available, as the increased area of the wheat fields of the world has not kept pace with the world's consumption of wheat. The higher standard of life which has been set up has resulted in an increased demand, not only for what are commonly looked upon as necessities alone, but for what previously were considered luxuries. Wealth has in recent years increased rapidly. The trade boom which has been experienced during the past few years has been responsible for the circulation of an enormous amount of money, and of course has created larger ideas in the minds of those who have enjoyed what might be called unaccustomed wealth for the time. This has its effect on prices, but the ideas created still remain.

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Another factor which has to be taken into consideration in studying the question is the

NON-PRODUCING CONSUMER.

A far greater proportion of the community is engaged in the distribution or sale of goods than in their production. These people are the link between the producer and the consumer, and each has to take his toll before the goods arrive at their natural destination. It is surprising through how many hands, under our present competitive system, an article has to pass before it reaches the customer who buys it retail from the shop. In foodstuffs especially this applies, as there are so many merchants, agents, and commercial travellers who make their living by the commissions they draw from handling these goods. All these commissions, of course, add to the price of the goods. Then, again, these people, together with other non-producing members of the community, have all to be fed, housed, and clothed, and, although they do not produce anything, their demands for the necessities of life must have an effect in forcing up prices. Then take the question of

ADVERTISING.

Large sums of money are spent annually in this respect. Nowadays, advertisements are not the crude compositions and designs to which we were formerly accustomed. The showcards which are distributed by large firms, the posters one sees on the hoardings, are works of art, produced at enormous expense, each firm or company endeavouring to outvie the others in order to attract special attention to its own productions. Fabulous sums are asked and given for spaces on the hoardings, and there is a rush to get the best, and, of course, most expensive positions. One firm alone has spent more than one million pounds in thus bringing its productions before the public, and attributes its success to its enterprise in this direction. This is, of course, the result of competition. There is a tremendous waste here, but, being one of the expenses of production, the cost is added to the price of the goods. From the point of view of the consumer, surely it would be better that the money spent in this manner should be otherwise employed in helping to reduce the cost of the articles in question.

INCREASE IN ARMAMENTS.

Here is another, and a serious, factor in the rise in prices. Year by year an increasing amount of money is spent in maintaining and multiplying the fighting machines of the world. The soldier and the sailor, however useful they may be in keeping the peace between nations, are non-producers, but at the same time they must be kept. National jealousies are so strong that in European countries especially an increasing number of able-bodied men are

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being withdrawn from the community of workers in order that they may join the Army or the Navy. This fact alone, whereby they become consumers instead of producers, increases the demand in relation to the supply, thus helping to raise prices; but another serious factor is the enormous waste of money involved in manufacturing arms and ammunition, Dreadnoughts and the like, which each country is compelled to do in order to keep pace with the others. Notwithstanding all the efforts which have been made to come to some arrangement whereby this waste might be curtailed, money is being spent in this direction more rapidly than ever. The Chancellor of the Exchequer, in a speech which he delivered on July 15th, 1910, stated:—

The countries of the world are spending annually 450 millions of pounds upon this machinery of destruction. In twenty years there has been an increase of 200 millions per annum on this expenditure. All nations seem to be infected with an epidemic of prodigality in that respect which seems to be sweeping over the world, and sweeping to destruction. We take the lead in that expenditure. After all, we have the greatest Empire to defend, and we have got that excuse. But if the nations go on increasingly spending their money upon matters which give neither assistance nor support to their people on the road that leads to the highest civilisation they will inevitably suffer.

The fact that the money thus spent is raised by taxation in itself increases prices, because it is taken from its legitimate channel, *i.e.*, trade, where it could be more usefully and profitably employed, and practically thrown away, because as fast as these weapons and munitions of war are manufactured, and battleships, &c., are built, new improvements are introduced which render them obsolete, and entail increased expenditure upon others which are more up to date. Competition between nations is becoming daily more keen, and the amount spent on these engines of destruction increases every year. The consumer, whose only desire is to live in peace, has to pay the piper, since the amount of taxation he is called upon to bear in order that these things may be provided reduces his power of purchasing those commodities which are necessary to him.

It is estimated that since the year 1898 the Spanish-American War, the South African War, and the Russo-Japanese War cost about £900,000,000. Consumption during the continuance of these wars was naturally increased, and, in proportion to the population, production was considerably curtailed, the result being a great increase in demand in proportion to the supply, consequently a marked advance in the price of commodities.

We often hear it said that co-operation knows no frontiers. Surely, as the spirit of the movement spreads, the time will come when the workers of all countries will come to know each other, not as foes but as brothers, and will realise that the money which has been blindly thrown away in the past can be better and more profitably utilised in the future in alleviating the sufferings of common humanity.

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TRUSTS AND COMBINES.

No article of this description would be complete without a reference to the huge trusts and syndicates which, by retarding the supplies of commodities over which they have control, force up the prices to the consumer. It is impossible for trusts to develop in this country to the same extent as in those countries where they are fostered by high tariff walls; but even here we have huge combinations of capital dealing with cotton, iron and steel, wallpaper, and other industries. Trusts, as is well known, operate more largely in the United States of America than in any other country, and there they are greatly helped by the tariffs. The object of the trust is to eliminate competition for its own benefit. Competition, especially foreign competition, means lowering of prices, and where there is competition the manufacturer does not, of course, make the same profit out of the buyer as is the case where he has a monopoly. Consequently we find an industry which is not successful complains of foreign competition, and the Government places a tariff upon the foreign article in order that the home manufacturer may have the pull. The knowledge that the industry is safeguarded encourages other producers to enter the field. There is fierce home competition for a time, then the producers find that if they come to terms they will have full control of the output of that particular commodity and of the fixing of prices. This is the origin of the trust, hence "the tariff of an artificial limitation of the field of competition, and by an equally artificial stimulation of the industry doubly encourages trusts."*

The modern trust has been defined in general terms as "an arrangement for the control of several companies under one direction to cheapen expenses, regulate production, and beat down competition." This proves in itself that the trust is the outcome of modern industrial conditions. Monopoly itself is no new thing, for we find that in the Middle Ages there existed "gilds" in the various towns which had control of buying and selling. Even in those days we find that men had begun to combine for economic ends. In 1634 Charles I., believing that it would stimulate business and improve the quality of goods, granted the sole right to deal in certain articles to companies formed for the purpose. These companies were enabled to dictate to the public the price of the articles included in their patent, and restrain at their pleasure their manufacture or sale.

These monopolies were, however, in comparison with present-day methods, very much restricted. They were before the days of modern capitalism with its attendant evils. The advent of machinery has completely revolutionised the industrial world, and has greatly increased the rate and volume of production.

* Hirst, *The Story of the Trusts*.

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Machinery grows more elaborate and more expensive year by year, new inventions are constantly coming to the front which enable the work to be done in a more efficient manner. In order to keep up to date as regards increased production the old machinery is done away with and the new installed in its place. In most industries there are highly specialised machines to perform various minor operations. These depreciate rapidly, so that only a large business, with a great amount of capital, can afford to use them. With a large business, too, the materials can be bought in bulk, and therefore more cheaply. Hence with these and other advantages, such as shipping and transport facilities, there has been during the last century, and is now, a tendency to growth in the size of businesses, and to concentration and production on a large scale. The tendency towards combination is strongest in those trades which provide the necessities and comforts of life for the bulk of the people. A well-known instance is the Beef Trust of America, in which several large Chicago firms have practically controlled wholesale and retail prices of beef and cattle over most of the United States.

During the last twenty years or so combination among producers has increased very rapidly, and the control of the world's goods has gradually been getting into the hands of the few. Where previously there were several firms producing the same class of goods we now find a huge combination, with a central body controlling these firms, eliminating competition and the necessity for cutting prices and regulating production. The trust certainly does away with a great amount of waste, but the increased profits resulting therefrom go to line the pockets of the comparative few who form the trust.

As has been previously stated, the home of the trust proper is in America. There we have trusts on a very large scale indeed. The tendency towards combination in that country commenced about 1860 with the formation of pools, which, however, were short-lived, and generally collapsed after they had exacted high prices for a few months. The first real trust was the Standard Oil Company, of Ohio, which was formed in 1882. In this case the trustees held in their own hands the voting power of all the constituent corporations, and thus prevented all competition between them. This trust was so successful in its operations that others soon followed its lead, notably in the whisky, sugar, tobacco, and iron and steel trades, and, although anti-trust laws have been passed in most of the states, they still carry on business under constitutions altered to the minimum extent necessary to avoid bringing them within reach of the law.

Apart from the trusts, there are other methods of inflating prices, viz.: Price associations, corners, and pools. Price associations are brought into being for the purpose of fixing price

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lists, and sometimes for regulating output. They are generally local, and are usually formed between persons in the same class of trade or manufacture. A corner is purely speculative and temporary in character, and is an attempt to control all the immediate sources of supply to a market, and to exact high prices from the buyer. Any commodity may be "cornered"—food, metals, raw material, &c.—but a corner is merely a temporary withholding of supplies for the purpose of exacting high prices for the time being. There is nothing of a permanent nature about it. The formation of pools is another method adopted for curtailing wasteful expenditure in certain trades, controlling production, and fixing prices.

As already pointed out, the fact that Britain has no protective tariff prevents the establishment of trusts operating in the same manner as pertains in America. This fact does not prevent monopolies, or the formation of large capitalistic combinations, but it does to a great extent prevent such combinations obtaining monopoly prices, as owing to our Free Trade policy foreign competition has to be reckoned with. The tendency towards industrial combination in England is largely necessitated by the requirements of modern industry. These combinations are of two kinds, *i.e.*, horizontal and vertical. The horizontal type came into being as a result of several firms operating in the same branch of industry in a particular district finding themselves unable to maintain prices on account of the keen competition between them. In order to safeguard themselves and their particular branch of trade they combined or amalgamated into one huge concern, which controls production and regulates prices. By this means competition in the same market is done away with, the cost of production is considerably lessened, and other economies are effected.

"Vertical" combinations are somewhat different in character. Such combinations commence their operations at the very source, or as near as possible to the source of supply, and control production of the article from the raw material to the finished product. These combinations are at present mainly confined to the iron and steel trades, but the tendency is spreading to other trades, as, for instance, the Fine Cotton Spinners and Doublers' Association Ltd., which owns and works its own coal-mines, so that it shall not be dependent upon the market for the wherewithal to run its machinery. A large firm of soapmakers has acquired oil mills and copra fat supplies in various parts of the world in order to secure its supplies of raw material, and so absorb intermediate profits. Also the paper and printing enterprises have secured lumber forests and pulping mills so as to ensure their supplies of paper. Under modern conditions it is necessary that the various processes in certain branches of the iron and steel

industries should be carried on as far as possible under combined or concentrated management. The various branches of the industry have therefore combined forces, each plant becoming a co-operating link in the unbroken chain from the raw material to the finished article, the intermediate profits being treated as a final profit on the finished product. As an instance of this, I might mention Messrs. John Brown and Company Ltd., of Sheffield. This firm is a striking example of the advantages accruing from "vertical" combination. It owns extensive iron ore mines in Spain, Lincolnshire, and Northamptonshire, and several collieries within a few miles of its Sheffield works; it has its own blast furnaces for producing steel, &c.; and is connected with the Clydebank Engineering and Shipbuilding Co. Ltd. and Messrs. Thomas Firth and Sons Ltd., which is one of the finest firms in the world for the manufacture of ordnance and projectiles. The firm has also large interests in Harland and Wolff, of Belfast, shipbuilders and engineers, and is in a position to build and equip throughout, without the assistance of outside firms, the largest battleship or the fastest liner. The company is in the front rank of shipbuilders, having recently built that triumph of modern engineering the *Aquitania*, which is without doubt the finest vessel ever launched in these islands. There are several other instances of "vertical" combinations, all of which illustrate "the tendency towards the extension of activities and the acquisition of a complete vertical organisation of production which has resulted from the definite and deliberate combination—vertically—of firms engaged at different, though connected, branches of the industries."*

By a study of this present-day tendency towards industrial combination, some useful lessons may be learned which could be applied with advantage to the co-operative movement, and I propose to refer to the matter again in the second part of this paper. Before, however, concluding the first part, I would like to make a passing reference to the multiple shop, which is one of the greatest competitors the movement has to meet. Here, again, the tendency towards centralisation is very marked. All these companies work on the same plan, *i.e.*, to establish as many retail shops as possible in the various towns and villages, all of which are worked from the central *dépôt* or headquarters, the goods being purchased in bulk and distributed to the various branches for sale to the public. By the large quantities they are enabled to purchase in order to supply their various shops they are in a position to obtain their supplies at a cheaper rate, and are thus able to cut prices until they have worked up a trade. When they go into a new district they can afford to undersell other traders for a time until they have secured a connection, as the profits they make in other districts will more than outweigh any

* Carter, *The Tendency Towards Industrial Combination*.

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loss they may sustain in one. In some instances these shops will sell several articles at cost price in order to attract customers, and at the same time make huge profits out of the sale of articles which are either packed or produced by the company itself. Some of these companies confine their operations to one or two particular commodities, and make a speciality of these. The enormous quantities they can buy at a time, and the fact that, in some cases, they are the producers of the articles in question, enables them to successfully compete with other traders and yet make huge profits and pay handsome dividends to their shareholders. One and all they have reduced the cost of distribution to a minimum by their methods of organisation, and in some cases have realised the advantages of manufacturing and producing the goods in which they deal in order that the otherwise intermediate profit may find its way into their own coffers. This policy ensures high dividends for the shareholders, which is the goal at which they aim. The consumer, who by his purchases makes these high profits, does not benefit at all. It is he who lines the pockets of the shareholders, or, in other words, the capitalists, who thus exploit him for their own ends.

I have endeavoured to show in the foregoing pages how, and to what extent, prices have increased, and some of the causes therefor. In the latter portion I have deviated somewhat from the straight path, and have discussed at some length matters which perhaps are not strictly relevant to the subject-matter of this paper; but my reason for so doing was to show how the capitalistic concerns have realised that, by combination and concentration, they can cheapen the cost of production and distribution in order to make a better return on the capital invested. All these combinations, whether they be trusts, combines, or multiple shops, have but one end in view, *i.e.*, to make as much profit as possible for those who have found the capital to carry on the business. These profits in the end come out of the pocket of the consumer, and it now remains to be seen whether or not some of these profits cannot be retained by the consumer for himself, and so enable him to better the conditions under which he lives.

II. CO-OPERATION AS A FACTOR IN THE FIXING OF PRICES.

Having shown how the cost of living has increased, we will now consider whether there is any remedy for the present state of affairs, and, if so, how it is to be applied. We have seen how, within recent years, there has been a growing tendency among capitalistic concerns to combine for trading and manufacturing purposes. So long as we have to rely upon the present capitalistic system there would appear to be no likelihood of relief to any great extent. The shareholders of these concerns are themselves

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capitalists, and, of course, demand the highest possible return for their money. This does not tend to any reduction in prices—rather the reverse, as the level of prices must be maintained in order to pay the dividends. Further, the people who have money to invest in these concerns are not those who are hit the hardest by the increased cost of living. Their incomes are, for the most part, sufficiently large to render them practically independent of any ordinary rise, and, moreover, such rise is probably more than compensated for by the increased dividends they receive upon the capital they have invested. The consumer is exploited on every hand. He is entirely at the mercy of those who produce and distribute the necessities of life, who may fix the price from the raw material upwards at whatever amount they like. Competition has to a certain extent kept the level of prices down, and the consumer has been safeguarded; but now the keenness of competition is bringing about combination, its retarding effect will be gone, and the consumer will probably be in a worse position in the future than he is to-day, as the capitalistic combinations will have acquired such power as to be able to dictate their own terms. Those who suffer the most in this respect are the working classes, in whose case every shilling makes the difference between comparative comfort and continuous anxiety, and the spending power of whose wages is reduced by every increase in the price of commodities. It follows, then, that any attempt to ameliorate their condition must spring from the working classes themselves, and if they could only be brought to understand to the full their true position and the immense power they possess, in a collective sense, much might be accomplished. One man, or even a group of men, here and there working only for their own ends, and to satisfy their own immediate needs, can, comparatively speaking, do very little; but six million men, with a capital of £1 each, are in just as good a position for carrying on a business as six men who put £1,000,000 each into a trust. But there is this difference: in the one case the profits are divided among the six millions, whilst in the other the six add to their already great possessions by the profits they make out of the consumer. It is only by combination, then, that the consumer can do anything at all to improve his condition. There seems, however, to be a certain mistrust of combination on a large scale for business purposes among the workers—perhaps it is because they are so afraid of losing their individuality. If that is the case, and they decline to open their eyes to the exigencies of modern conditions, then I am very much afraid they will maintain their proud isolation at the expense of their well-being for all time. Now is the time to act; to-morrow may be too late. It has already been pointed out that trusts and combines are increasing and becoming more and more powerful. Huge businesses are the order of the day owing to the fact that great economies are

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effected thereby. The necessity for reducing the cost of production under present-day conditions is becoming more and more apparent, hence the tendency of the large combinations to produce their own raw material in order to do away with intermediate profits. On every hand we find these combinations are taking up concessions of land for the purpose of getting as near as possible to the sources of supply. Will not this be a powerful weapon in their hands when the time comes—and come it will—when the co-operative movement will have to fight for its very existence? If all the sources of supply are captured by the opponents of the movement, could they not dictate to the movement the prices it will have to pay?—nay, could they not refuse to supply the movement at all, and so crush it for ever? This is not without the bounds of possibility. What is to be the position of the co-operative movement in the future? Sooner or later, unless strong measures are taken to make its position secure, the movement will run a serious risk of being crushed to the wall by the forces combined against it. Therefore, it behoves those who are responsible for the welfare of the movement to guard jealously the heritage which has been handed down by those who have gone before. The times through which we are moving are as critical to the movement as any through which it has passed. Whereas, in the beginning, its opponents looked upon it with a sort of tolerant amusement, they now realise what a force the movement has become. On all sides combinations are being formed to fight it and to arrest its progress. As one instance of this I would quote the action of the Proprietary Articles Traders' Association, which is insisting that co-operative societies shall not sell proprietary articles at the same price as other traders, and at the same time pay a dividend on the purchases of such articles. Is not this striking at the bed-rock principle of co-operation? How can the movement defend itself against these attacks? There appears to be but one way. The movement itself must manufacture these articles; and as regards the broader question it must get at the sources of supply and grow the raw materials for its own factories before it is too late; otherwise such sources will be closed to it, and it will be compelled to buy in the open market at prohibitive prices, or else find the market closed to it altogether. True, the C.W.S. recently sent deputations to West Africa and to Assam, and as a result great things may be accomplished; but, in order to do real and lasting good, operations must necessarily be on a much larger scale. Concessions of land can be obtained in all our colonies, in all climates, suitable for growing all requirements so far as the raw material is concerned. Such raw material could be used by the movement in its own factories, through all the processes of manufacture to the finished article for sale in its own shops. Thus the movement might progress until it had made itself independent, self-supporting, and self-contained. All this of

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course requires money, and the question arises: where is the necessary capital to be obtained? A large amount would of course be necessary. Even the great Wholesale Societies, with all the resources at their command, could not proceed unaided. In the last return published by the Co-operative Union we find there were in 1913 2,878,648 members of co-operative societies, who held collectively £37,275,057 share capital and £5,326,708 loan capital, a total capital of £42,601,765, this being an average of nearly £15 per member. This seems a small enough amount for any member to have at stake, but when one realises that this is only an average, and that a great percentage of members use the societies as their sole means of saving, holding £100, £150, and £200 share capital, then the holding of some members must be very low indeed. I think if a business proposition were put before the average co-operator, and he realised to the full the advantages which would accrue to him personally, and to his class generally, he would be willing to invest considerably more than the average amount above referred to. Then, again, a great deal of money belonging to co-operative members is not invested in the movement at all, for the reason that the societies cannot make profitable use of it. I know of several societies which (although the Industrial and Provident Societies Act allows a member to hold up to £200 in shares) limit the amount which a member may hold to £100, £50, and even £25. This tendency seems to be a growing one, as societies do not want to pay 5 per cent. or 4 per cent. on share capital for which they have no use, and upon which they themselves by re-investment can only obtain $3\frac{1}{2}$ per cent. If societies, to oblige their members, do accept more money as share capital than they can use in trade, it means they have to make up the extra percentage over and above the $3\frac{1}{2}$ per cent. earned by such capital out of their profits. Where, then, is all this money which cannot find profitable investment in the co-operative movement going? In the majority of cases it is invested in private enterprises in some form or other, to be used as shot and shell by the very people who are opposed to the movement. If the co-operative movement is to be successful in its endeavours to control prices, this money must be kept within the movement, and some means must be devised whereby this may be done. It is known without doubt that individual societies cannot make profitable use of the whole available co-operative capital. A great many societies are at present overburdened with capital. It cannot be used in distribution, therefore it follows it must be used in production. The productive societies of the movement, in the majority of cases, have more than enough capital for their requirements, being simply engaged in manufacturing. Their operations do not extend far enough to use such capital in the production of the raw and unfinished articles they use in their factories.

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Can it be said that the co-operative movement exercises that control over prices which it ought to by reason of its volume of trade? I am afraid not. And yet the retail societies distributed goods during the year 1913 to the value of £83,615,175. There seems to be something lacking when a concern with such a huge turnover has to follow in the wake of others, and dare not take the initiative and fix prices for itself. The demand for high dividends has much to do with the impotency of the movement in this direction. It is not possible for prices to be reduced when dividends of 3s. and 4s. in the £ have to be maintained. This shuts out from the benefits of co-operation a vast multitude of the poorer classes to whom the first cost is a considerable item. It is all very well for the artisan; he can afford to wait until the end of a quarter or half year for the return of his share of the profit in the shape of dividend. Not so the poorest; they cannot afford to pay the price asked and wait for the dividend. With them it is the first cost which counts, and they naturally go to the shop where they can buy most cheaply. The benefits of co-operation are thus denied to them, and the private trader or multiple shop makes a nice profit out of such people. Owing to the high prices in vogue with some societies, the private traders are themselves enabled to put up their prices, it may be only a small percentage, comparatively speaking, but they are thus in a position to make a little more profit out of the consumer. This craze for high dividends is without doubt one of the reasons why the movement has not more control than it has in regard to prices. Moreover, it is not a healthy sign, and it militates against the very people for whose benefit the movement was founded. The object of the co-operative movement is to make the lives of those who care to join better worth living—to make them more comfortable in their homes, in their work, and in their surroundings generally, and yet those people who most need its benefits are prohibited from obtaining them.

Another reason is the want of loyalty of the member to his store. If the movement had the undivided allegiance of those who profess to be members of it, its chance of success in this direction would be greater. If we take the latest statistics relating to the movement, we find that in 1913 there were 2,878,648 members of distributive societies, whose purchases for the year were £83,615,175, an average of just over £29 per member, or about 11s. per week. When we take into account that the bulk of the members of societies are married and have families, 11s. certainly does not represent a member's requirements for a week. Evidently, therefore, some of his requirements are purchased from outside sources. There must be some reason for this, and no stone should be left unturned in order to fathom it. Each society should be in a position to cater for *all* the requirements of its members. Further than this, however,

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there is a lack of loyalty to the C.W.S. and to co-operative productions generally on the part of societies' buyers. A very simple illustration will suffice to bring this home to the readers of this paper. We cannot get behind the figures published officially by the Co-operative Union, as they are very carefully analysed and extracted from returns sent in by the societies themselves. As I have previously pointed out, the sales of the distributive societies for 1913 were £83,615,175, of which goods to the value of £31,371,976 were purchased from the Co-operative Wholesale Society, £8,964,033 from the Scottish C.W.S., and £3,710,234 from the productive societies, making a total of £44,046,243. This amount represents of course the wholesale prices, and a few calculations will be necessary to arrive at the retail value of the purchases of societies through co-operative sources. For the sake of argument, we will take an average dividend of 3s. in the £, or 15 per cent., and working expenses 1s. 6d. (average), or 7½ per cent., which, with interest on the share capital employed (£1,473,435), and interest on loans (£213,068), which were the actual amounts paid under these heads in 1913, makes a total of £11,596,907, which must be added to first cost to arrive at retail selling price. This works out at £55,643,150, and represents the retail value of the goods purchased by societies from co-operative sources—yet the total trade of the societies is £83,615,175. What, then, is the source of the trade represented by the balance of £27,972,025? If the Wholesale Societies are to control the markets in any way they must have the full support of the societies' buyers. From the figures quoted above it would appear that the distributive societies purchase not more than 66·54 per cent. of their requirements from co-operative sources. The balance of 33·46 per cent. is obtained from those who are in direct opposition to the movement. These figures speak for themselves and need no comment. It is obvious, however, that if members were more loyal to their respective societies and societies were more loyal to their own institutions the movement would, owing to its greater purchasing power, by means of concentration, have more control over prices than it has at present. Voluntary co-operation is, of course, the best thing wherever possible, and there can be no gainsaying the fact that it has worked very well up to the present, but the times are changing. Business is now conducted on quite different lines to what it was when the movement was first initiated. The stress of modern conditions demands different methods than were formerly in use. It is now the reign of large combinations of capital, and amalgamations are the order of the day. What is the co-operative movement going to do? Is it to keep pace with the times, or is it to go on in the same old way until by force of circumstances it is crushed out of existence? The C.W.S. is in a very peculiar position. It is the central distributing agency of the movement, but societies are under no compulsion

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as to drawing their supplies therefrom. The members who attend the quarterly meetings of the C.W.S. and vote for the minimum wage, eight hours day, &c., are not always ready to back up these sentiments by means of increased purchases from the C.W.S. In the field of production, also, the hands of the C.W.S. are tied. It cannot extend its operations in this direction unless there is a demand which will warrant it doing so. The policy of the C.W.S. is to meet the demands of societies as far as possible, but it stands to reason that as a business concern it cannot enter into the production of any commodity unless and until it is sure of a market. The expense which would necessarily be involved is too great to admit of such experiments unless it had some guarantee that its efforts would be backed up. When it is seen how dependent is the C.W.S. upon the caprice of retail societies and their buyers, it will be readily understood how great would be the risk incurred in striking out in new directions. The movement as it is to-day is not the compact body which some of its adherents would like it to be. The spirit of commercialism is creeping in to the danger of the ideals of its founders.

Much might be said on the subject of overlapping and its consequent evils. Competition and co-operation are two widely different terms, and have nothing in common, and certainly there should be no competition within the movement itself. Co-operators must not lose sight of the fact that the ideals are the breath of the movement, and that commercialism is but a means to the end. What does the term "co-operation" really mean? It means the *working together of all co-operators*, and not the fragmentary co-operation of a few in one place and a few in another. To carry out the true principles of co-operation and to realise the ideals of the Pioneers the societies composing the movement must be more closely organised one with another; but how is this to be accomplished? To my mind there is but one way. The movement must take a leaf out of the book of its opponents and form a trust—a trust not for the few but for the many—a trust of and for the people.

Eight years have elapsed since the late Mr. J. C. Gray, in his inaugural address at the Birmingham Congress, outlined his scheme for a "National Co-operative Society," which, though approved of by a few, was despised and rejected by the many. The opinion has been expressed by a few earnest co-operators who have the welfare of the movement at heart that the National Society, or something equivalent to it, will have to come if the movement is to hold its own in the future. If this is so, as—if one gives the matter careful thought, in view of the present tendency in every trade towards combination—would seem to be the case, then the sooner a move is made in this direction the better it will be. It is no use delaying the matter, lulling ourselves into a sense of

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false security, to find when we awake that others have taken advantage of their opportunities and forestalled us. If the movement is to justify its existence it must be one of the first in the field. Since the scheme for a National Society was first inaugurated it has been discussed favourably and otherwise at conferences all over the country, and the chief objections seem to be the retention of half dividend and the fear that loss of local interest might follow from its establishment. Mr. Gray advocated the retention of half the dividend due to a member, which would be credited to his transferable share account. In the minds of some co-operators this appears to be the most objectionable feature of the whole scheme. But why? Surely co-operators are willing to stake something for their future happiness and well-being. Under the present system members might object to leaving half their dividend as share capital, but under the national scheme, if the true purport of the National Society were clearly brought home to them, the members would realise the advantages which would accrue to them as individuals by increasing the capital of the National Society. Each individual member would become a capitalist in a small way, and would at the same time be carrying out and helping forward true co-operative principles. The funds accumulated by the creation of these shares would be used in growing the raw material required for use in the co-operative factories. The money would thus be invested merely as a means of saving intermediate profits and ultimately reducing the cost of the finished article, of which the member would reap the benefit. The reduced prices which would follow from this would, to my mind, more than compensate the member for the retention of his dividend. By leaving part of his dividend the member is simply "casting bread upon the waters," which would be returned to him manyfold. Why should there be any reluctance on the part of the co-operator to invest his money in his own concern, whether such investment be in the nature of cash deposited or as profits due? He must be a capitalist in a way if his society is to succeed. A great many people would be only too glad to have a safe investment yielding 5 per cent. interest, and this is what the co-operator would be getting on any capital he had invested in the National Society. If he were wise he would leave not half but the whole of his dividend in the society, as by doing so he would be furthering his own interests by enabling his society to enter even more largely into the fields of production. The more capital invested in the National Society the more it could do in the way of production, and the more the movement can produce for its own consumption the cheaper will those commodities become.

There is a good deal of prejudice against the nationalisation of the movement, on the ground that such a scheme would do away with local interest, and that the committees of societies would be

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deprived of control. To a certain extent they might, although there would still be important duties for them to carry out; but to those who cannot or will not see beyond the limits of their own particular society I would point out this fact, that true co-operation cannot be parochial—it must be national and even world-wide. “Co-operation” must not be interpreted to mean that you and your particular friends shall work together for your own individual gain. Co-operation has an infinitely wider meaning than this. It means that men shall work together for the good of *all* men. To arrive at the true conception of co-operation it must be lifted out of the parochial into the national. If we cannot appeal to sentiment in the furtherance of these national ideas, we must endeavour to win over these people whose range of vision is so circumscribed by showing them the material advantages to be gained.

The evolution of a National Society out of the multitudinous societies at present in existence would naturally be slow and gradual. It is as well this should be so, as the necessary organisation, to be perfect, must be of gradual growth. The question arises: how is it to be accomplished. The first step would be for the C.W.S. to take power in its rules to carry on a retail trade, not in competition with existing distributive societies, but to open out branches in isolated districts, where, owing to the poverty of the people or lack of initiative, co-operation is at present unknown. By this means the advantages of co-operative trading would be brought home to those people who might otherwise never have been reached. The amount of non-members’ trade as ascertained from published statistics is under 2 per cent. of the total trade of societies, thus proving that the bulk of those people who commence to buy at co-operative stores very soon realise that it is to their advantage to become members and so get full dividend, rather than remain without the fold and be content with one-half of the profit which is paid to members. The extra dividend payable to a member soon makes up the share capital which it is necessary to hold. If people can be attracted to the shops they will soon become members, and once gathered within the movement it is for the movement to make them true co-operators. The main object is to get them to purchase at the store—the rest will follow. This is where the retail department would do good work, and there cannot be any doubt that the business thus carried on would be profitable. Several parts of the country, especially in agricultural districts, remain untapped by the movement. The requirements of the inhabitants are either supplied in the old-fashioned and totally inadequate way by the small village grocer, or are catered for by one of the big multiple businesses, which are out to make large profits, and certainly do not consider the consumer in any way. A strong retail department of the C.W.S. could enter into these fields of operation and show the consumer the advantages accruing from co-operative trading. By becoming a retail society,

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as well as a wholesale society the C.W.S. would become the nucleus of the National Society. Little by little those societies which perceived the advantages to be gained by amalgamation would amalgamate with the C.W.S. retail department, and become a branch thereof. The wholesale department of the C.W.S. would still be kept separate and distinct in order to supply the needs of both the independent societies and its own retail department. This would pave the way for the National Society, and when all societies had come into the combination the C.W.S. would change its name and constitution, and thus become a trust in itself, owned and controlled by those for whom it provided the necessaries of life, each individual member of the trust participating in the profits made by it, not, as is the case with the capitalistic trust, according to the amount of capital held by him, but on the amount of purchases which he had made. The advantages to the consumer who was a member of the trust would be enormous, as owing to the greater economies effected by means of concentration prices of commodities would be considerably reduced. There are at present 1,508 societies with probably 7,000 branch shops. All these shops would become branches or distributing agencies of the trust. The country would be divided into groups, and the goods would be distributed to each branch from depôts established within those groups. In some cases, however, goods would be sent from the ports direct, and thus save needless expense in carriage. All goods sold in the branches would come from one source, *i.e.*, the central authority, instead of from several sources as at present. All buying would be done from the centre, and the whole of the co-operative trade being focussed through one channel, better terms could be obtained from the producers, and in other directions great economies would be effected. The area covered by the operations of the National Society would be divided into districts, each district having representation on the central council or committee, which itself would be divided into sub-committees, dealing with the various phases of the business of the society. In order to maintain local interest each branch might elect a local committee from among its members. These local committees, who would naturally understand the requirements of the members dealing at their particular branches, would have a free hand in stocking their shops and also in managing all local affairs. They would carry on all propaganda and educational work in their district, having a certain sum allocated to them by the central committee for this purpose periodically. Also at certain periods of the year they would have power to send representatives to the general meetings of the National Society, which would take the place of the present annual Congress. The prices to be charged for goods, the appointment of all servants necessary for carrying on the business of the National Society, and matters of policy and finance, would be decided by the central authority, and the business, including the

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buying and selling of goods, would be under its control. One of the most important features of the National Society would be that a fixed dividend would be paid to *all* members of the society. I would suggest an all-round dividend of not more than 2s. in the £, less if possible. Prices would be fixed on this basis, and any profit over and above the 2s. dividend would be used in furthering the society's interests. Share capital should have a fair return, and I would suggest that 5 per cent. per annum would be a reasonable rate. Each member of the National Society should hold at least one transferable share of £1, which would not be withdrawable under any circumstances. The society would then be assured of at least as many pounds capital as it had members.

Once the National Society is established on these lines, and with its continually accumulating capital, it could extend its operations in the field of production both in regard to the raw material and the various manufacturing processes. In course of time it would become both a "vertical" and "horizontal" trust, producing from the raw material through every process of manufacture to the finished article, and distributing such manufactures and productions through its own shops to the consumer, who, under the co-operative system, is thus enabled to buy his commodities at actual cost price plus the cost of manufacture and distribution. The intermediate profits of the producer, manufacturer, agent, merchant, and middleman are thus eliminated, finding their way instead into the pocket of the consumer, who would himself have fixed the price he has had to pay for his requirements. By this means he would have travelled a long way on the road towards solving the problem of the reduction in the cost of living, as he would be as near to the actual source of his requirements as it is possible to get. The sphere of activity of such a trust would be illimitable. It would feed, clothe, and probably house its members, and would find occupation for a considerable number of them. Under the present system individual societies have often to meet fierce competition and price-cutting on the part of the multiple shops, with the result that certain members are attracted to these shops for their purchases of one or two particular articles of which a speciality is made. The National Society would, with the immense resources at its command, be able to successfully meet these attacks, as there is no reason why it should not sell any commodity cheaper than any other combination could possibly do. If any branch of the National Society were attacked in this manner all the forces of the society would be behind that branch, which would make it an impossibility for any undercutting to succeed. If, as would seem to be the case, the establishment of a consumers' trust or National Society on the lines I have endeavoured to point out had the effect of reducing the cost of living all round, it would be the finest advertisement the movement has ever had or could possibly have. Consumers

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generally would begin to realise how short-sighted they had been in providing enormous profits for those who manipulated the necessities of life, when such profits might have been retained for themselves. The very fact that co-operation had been instrumental in reducing prices would be an incentive to those people to join the movement and to share in the advantages to be derived from co-operative trading. A great many people are lost to the movement because they do not know sufficiently about it, and in fact have not taken the trouble to inquire. The National Society would become such a force in the nation's affairs that the eyes of all would be opened, inquiries would be made, and increased membership would follow. As I have stated previously, they would be attracted by the material advantages to be gained from membership; afterwards they could be imbued with the co-operative spirit. In support of this I would point out that in the first days of the war the fact that co-operative societies were in a position to keep prices down caused hundreds of people who had hitherto obtained their requirements from the private trader to apply for membership, as they recognised the superior position in which members of co-operative societies were placed in the crisis. The National Society, too, would give a fillip to co-operative productions. There appears to be a certain amount of prejudice against co-operative productions among some of the members. Why this should be so I cannot understand. The co-operative factories are the finest in the world, and the goods are manufactured under the most ideal conditions. Probably it is because co-operative productions are not well enough known on account of them not being brought into sufficient prominence. Possibly those who will not have co-operative productions have not tried them. They have been so accustomed to seeing advertisements recommending articles manufactured by certain firms, which advertisements have practically become household words, that they never think of trying anything else, acting upon the supposition that because those articles have been so extensively advertised for so many years nothing can be as good. A particular article has become so identified with the name of a particular firm that if a customer asks for that article he expects the article which has been manufactured by the firm in question. Now, we know that co-operative productions are second to none, and so far as purity is concerned stand in the front rank. Therefore, it is the duty of co-operators to buy none but the productions of their own factories. Under the present constitution of the movement societies' buyers are not compelled to take co-operative productions, and there is no incentive to push them. With the National Society there would be no relying upon the goodwill of buyers. Co-operative productions would be placed in the branches for sale, brought prominently before the notice of members, sold at a proper price—probably cheaper than similar productions of the private trader (the fact of

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the society producing for its own shops would enable this to be done)—and a demand would thus be created. When the National Society reached its full development; producing raw material, manufacturing, and distributing, the prices of the finished articles would in most, if not all, cases be beyond competition, and as price is a considerable factor with most people (the quality of co-operative productions need not be questioned) a considerable demand is likely to be created; in fact, although a bold statement to make, it might even be prophesied that ultimately none but co-operatively produced goods would be sold in the co-operative shops. And one of the advantages of nationalisation would be this: the necessity for exercising such great caution, as is the case at present, before entering into new fields of production would be done away with, as, instead of waiting for a demand, the National Society could create one, its market being assured.

From whatever point of view one looks at the question it is bound to be conceded that the fullest advantages of co-operation can only be secured by amalgamation, with its resultant economies through prevention of overlapping, concentration of production and the centralisation of office work, buying, distribution, and financial arrangements. If, in place of the present aimless system of isolation, each unit were enrolled in one strong army—the National Co-operative Society—well posted, well organised, presenting a solid front to the enemy, how much better equipped would the movement be for withstanding all attacks and pushing forward towards increased prosperity and complete victory. There is collective wealth undreamed of among the working classes, and their savings, by complete combination, could be more effectively used in their fight against capitalism. By controlling the sources of supply and production the National Society would, with its assured market, have a decided voice in the settling of prices. It would be bound to make its influence felt, as it would be one of the largest trusts in the world—moreover, a trust with a soul, a trust composed of and for the benefit of the masses.

The possibilities of the National Society are great—it is impossible to enter into them here—but how are the members to be aroused from their present apathetic attitude? Here is a grand opportunity for those enthusiastic propagandists who are the leaven of the movement. The members must be educated to a sense of their responsibilities. It cannot be denied that in the early future co-operation will possess enormous opportunities of becoming the determining factor in dealing with the all important question as to what the cost of living in this country shall be. Will co-operators, when the time arrives, make full use of such opportunities? The tendency towards industrial combination was never more apparent than it is to-day. It is not sufficient that co-operators should keep pace with the times; they must do more

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than this if they wish to prove themselves worthy of the spirit which actuated the founders of their faith. It is necessary that co-operators should now take up the banner once carried by their forefathers, and become, as they were, the pioneers in the great army of industrial regeneration. By so doing they will show to the world that is to be that they believe in co-operation in its *fullest* and *widest* sense, because it offers such possibilities, beneficial to all mankind, as the mind of man has never yet conceived.



The Handling and Transportation of the Canadian Grain Crop.

BY EDWARD PORRITT.

THE Canadian grain year—the year that covers the transport and marketing of the crops of Manitoba, Saskatchewan, and Alberta—begins on September 1st and ends on August 31st. It is fixed, like so much else in the economy of the grain trade of the prairie provinces, by the Dominion grain code—the enactments of Parliament that date back to 1887, when the grain trade west of the Great Lakes had become too large to be handled without Government supervision and regulation. The navigation season on the Great Lakes, during which western grain is carried from Port Arthur and Fort William, at the head of Lake Superior, to Buffalo or Montreal en route for London, Liverpool, Avonmouth, or Glasgow, usually begins about April 11th and closes about December 5th, when the coming of winter makes navigation no longer possible.

Each grain year, each navigation season, develops some new feature in the trade. For the year that ended August 31st, 1914, the memorable feature is the fact that it is the first year in which the Dominion Government, as well as the provincial Governments of Manitoba, Saskatchewan, and Alberta were all embarked, at the instance of the grain growers' associations, in the handling and storing of grain.

Canada is the most individualistic of the oversea dominions; and also pre-eminently the part of the British Empire in which organised capital has the largest and freest opportunities, and receives the greatest amount of help from Government. There is a railway connecting St. John and Halifax with Montreal—a railway that was built as a condition of bringing New Brunswick and Nova Scotia into confederation in 1867—that is owned and operated by the Dominion Government. It has always been operated at a loss, certainly to the extent that it has never earned interest on the capital cost; for the territory that it serves is thinly populated, and could not have carried a railway like the Intercolonial. But the Intercolonial, as its name implies, is a political railway; and had it not been built and maintained by the Government the Maritime Provinces would not have been of confederation. The provinces of Saskatchewan and Alberta,

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actuated by the newer spirit of the west, as distinct from the conservatism of the provinces east of the Great Lakes, also own their telephone systems, and have made them pay.

Generally speaking, however, all the public utilities in Canada that pay good returns on investments, such as railways, telegraphs and telephone lines, street cars, and gas and electric undertakings, have been reserved for private capitalists; and until the Governments of Manitoba, Saskatchewan, and Alberta, and the Dominion Government, went into the business of storing grain, public ownership of public utilities in Canada had made no greater progress than it has done in the United States. In Eastern Canada—the part of the Dominion that lies between the Great Lakes and the Atlantic Ocean—public ownership of public utilities has never gained any hold. That the principle has in the last four years made great progress in the prairie provinces, which have an individuality and a life of their own, is due entirely to the activities of the grain growers' associations, which in their political movements and enterprises are inspired by much the same spirit as has so long actuated the co-operative movement in the United Kingdom.

In connection with the Intercolonial Railway, the Dominion Government since 1898 has owned and operated storage and transfer elevators at Halifax and St. John. These elevators are used for handling the comparatively small volume of grain that is exported from these Maritime Province ports, in the winter when no grain is moving eastward from Port Arthur and Fort William by the lake and canal route, and when there is no business at Montreal or Quebec because the St. Lawrence is closed by ice. Part of the general equipment of the western grain trade also includes elevators at lake ports in the province of Ontario—ports such as Midland, Port McNicoll, Dépôt Harbour, Tiffin, Collingwood, and Port Colborne. During the navigation season grain is carried to these Ontario ports from Port Arthur and Fort William in steamers that are too large to pass through the canals which give access from the lakes to the St. Lawrence River.

By means of these elevators grain is transferred from the lake steamers to the Canadian Pacific and Grand Trunk Railways for shipment to the elevators at Montreal, whence it is finally transferred to the ocean-going steamers which carry it to London or Liverpool. The Dominion Government has owned a large transfer elevator at Port Colborne since 1908; but from the beginning of the western grain trade in 1883 until 1910, when the Manitoba Government first ventured into the elevator business, the ownership of what are known as the line or country elevators—local elevators to which the grain growers send their crop—in Manitoba, Saskatchewan, and Alberta, and of what are known as terminal elevators at Fort William and Port Arthur, was left to private capitalists or dividend-earning companies; subject, however,

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since 1887 to some degree of oversight and control by inspectors of the Dominion Government charged with the administration of the grain code.

Grain shipments from west of the Great Lakes began in 1883. At that time Manitoba, with a population of not more than sixty-three thousand people, was the only organised province between Lake Superior and British Columbia. The intervening prairie country, out of which in 1905 the provinces of Saskatchewan and Alberta were carved, was then known as the North-West Territory. There were few people in this territory. None of them in 1883 were growing grain, either for shipment to millers in Ontario or for export to Great Britain; and it was 1887, two years after the Canadian Pacific Railway had been carried across the continent



FROM THE FARM TO THE COUNTRY ELEVATOR.

*By courtesy of
Grand Trunk Pacific Railway Co.*

to Port Moody, British Columbia, before the entire western crop, including some grown in the North-West Territory, aggregated 3,800,000 bushels. This was the volume of grain that passed through Winnipeg in 1887, the first year after Winnipeg had been made the inspection point under the Dominion grain code, and the year in which the present system of marketing grain on certificate of grade was established.

The first shipments of grain from Manitoba were made in 1883; after the Canadian Pacific Railway had been carried westward from Port Arthur and Fort William to Winnipeg and Brandon. At this time there were no line elevators in the interior, and no terminal elevators at either Fort William or Port Arthur, where to-day there are twenty-one elevators with an aggregate storage capacity of forty-two million bushels, at which in the grain year 1912-13

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222,000,000 million bushels of wheat, oats, barley, and flax were handled. In 1883 the business of transporting grain eastward from the prairie country to Toronto and Montreal, partly by rail and partly by lake, was entirely new; and no one who was then engaged in it—grain growers, grain dealers, or transport company officers—could have conceived the proportions the business was to assume after the provinces of Saskatchewan and Alberta had been organised, and the great inpouring of emigration had begun in 1906.

Ordinary freight sheds were used at Fort William for the storage of the Manitoba grain crop of 1883; and when the pioneer lake grain carrier—the steamer *Erin* (Captain Sullivan)—took on her first cargo in the autumn of that year, some of the grain was carried to the steamer in bags, and the rest was hauled from the sheds to the boat in wheelbarrows. The first elevator was built at Port Arthur in the winter of 1883-4. It was known as King's elevator; it was of 350,000 bushels capacity, and went into service when the grain crop of Manitoba began to reach the head of the lakes in the autumn of 1884. To-day the twin cities of Port Arthur and Fort William—only three miles apart—with their storage capacity of 42,000,000 bushels, form the second largest grain shipping centre in the interior of the North American Continent;* and in the first three months of the grain season of 1913-14—that is, in September, October, and November, 1913—116,385 cars of grain were inspected at Winnipeg, and 112,492,000 bushels were loaded into lake steamers from elevators at Fort William and Port Arthur.

Almost from the time the first terminal elevators were built at the head of the lakes, and grain dealers began to build line elevators in Manitoba, Saskatchewan, and Alberta, the system of private ownership was unsatisfactory to grain growers. Their complaint against the line elevators was that they could not trust their management—that grain growers were cheated in weighing, that the rates of dockage and shrinkage were too high, and that they were the victims of other sharp practices. It was a conviction of many grain growers that the managers of line elevators were expected by the owners to make at least the amount of their salaries by sharp practices of one kind and another worked on the grain growers; and there was also a complaint of the absence of competition at most of the places from which grain growers had to ship their grain.

Against the terminal elevator companies the grain growers complained that, despite the numerous Government officers constantly in attendance when grain is being received and shipped, grain of different grades was mixed, to the disadvantage of the growers and to the gain of the companies owning the elevators.

* Chicago, where the aggregate storage capacity is 46,000,000 bushels, is the largest centre of the trade.

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These practices at the terminal elevators were long suspected, and in 1910 two grain companies operating elevators at the head of the lakes were proved guilty of them, and heavily fined in the police court at Winnipeg.

In the early days of the grain business—between 1883 and 1900—the methods of the railway companies were also unsatisfactory to the growers. They complained in particular of favouritism in assigning cars to men who were anxious to ship their grain to the head of the lakes, and also of the persistent refusal of the railway companies to provide loading platforms at stations. Platforms were demanded by the grain growers in order that they might be independent of the local line elevators. The line elevator companies were not favourable to loading platforms, because they had been encouraged by the railway companies to build elevators for the shipment of grain, and they felt that they were consequently entitled to all the business originating at the stations where the elevators were established.

Amendments to the grain code made from time to time remedied some of these grievances of the grain growers against the railway companies, and the code was also tightened with a view to eliminating the practices at the line and terminal elevators which were prejudicial both to the grain growers and to the reputation of western grain. The system of private ownership, however, still remained unsatisfactory; and just as soon as the grain growers' organisations acquired strength they began to work for public ownership, and between 1908 and 1912 this movement was so successful that the Governments of the prairie provinces and of the Dominion were compelled to make concessions to it.

Two of these Governments—that at Ottawa and that at Winnipeg—are Conservative in their political complexion. The provincial Governments of Saskatchewan and Alberta are Liberal. But most of the grain growers are electors; and as the grain growers' associations increased in strength and numbers, and as it became obvious that they were organisations of permanent character, their demands began to have weight with the provincial Governments, and also at Ottawa on all questions except those that arise out of the protectionist tariff or the movement for reciprocity with the United States.

The grain growers' associations of the prairie provinces, which constitute to-day the most potent factor in the life of the country west of the Great Lakes, and the one organised democratic force in Canada to which the Dominion and provincial Governments must give heed, date back to 1901. On December 18th of that year grain growers met at Indian Head, Saskatchewan, and organised the first of the growers' associations. No sooner was the Saskatchewan Grain Growers' Association established than a similar organisation was created for the province of Manitoba.

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In Alberta there were two grain growers' organisations—a branch of the American Society of Equity, established in 1903, and the Alberta Farmers' Association, which dated from 1905. Both these organisations prospered; and in 1909, after both of them had been for about a year affiliated through the Interprovincial Grain Growers' Council with the grain growers' associations of Saskatchewan and Manitoba, they were merged into one organisation, now known as the United Farmers of Alberta.

The movement for the Interprovincial Grain Growers' Council began with the Alberta organisations. The Manitoba and Saskatchewan associations promptly gave it their support, and in the winter of 1909-10 all the prairie province associations joined the Canadian Council of Agriculture, which had been created by the granges and other farmers' organisations of the province of Ontario.

The problems of the farmers of Ontario are not identical with those of the grain growers in the country west of the Great Lakes. The Ontario farmer is scarcely touched by the grain code that determines so much of the economy of the trade that is centred at Port Arthur and Fort William. His grain is not inspected and certified according to grade by officials of the Dominion Government as is the case with all the grain that passes through the elevators at the head of the lakes. The Ontario farmer also comes into very little contact with the elevator system, and lake and ocean freights do not affect him to anything like the extent to which they affect the grain growers of Manitoba, Saskatchewan, and Alberta. But tariff duties on farm machinery, hardware, lumber, cement, and other farm supplies affect the Ontario farmer quite as much as they affect the grain growers of the west; and since its establishment in 1910 the Canadian Council of Agriculture, representing farmers and grain growers in the wide area of country that stretches from the Ottawa River to the Rocky Mountains, has been the most potent of all organised democratic forces that exert any influence on legislation at Ottawa.

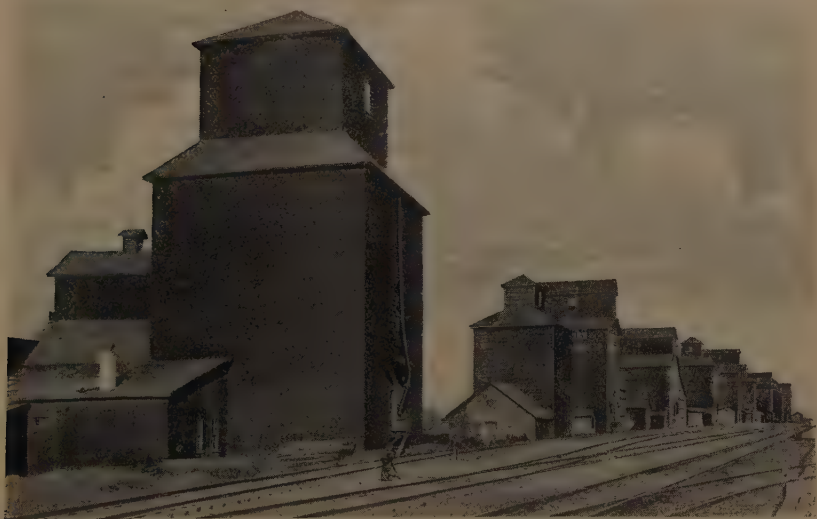
The aim of the movement that began in 1901 with the organisation of the Saskatchewan Grain Growers' Association was (1) to free grain growers from the exactions of elevator owners at interior shipping points, and also at Fort William and Port Arthur; (2) to relieve grain growers from the power of a combine which existed among grain buyers at Winnipeg; and (3) to work for lower railway rates from interior shipping points to the terminal elevators at Fort William and Port Arthur.

In all three provinces there are local grain growers' associations, and in each province these local associations are federated in a central organisation, of which the president and the executive council are elected at a general provincial convention held each winter. The movement in all three provinces grew in strength



DOMINION GOVERNMENT TERMINAL ELEVATOR AT PORT ARTHUR.

*By courtesy of
Canada Grain Commission, Fort William.*



COUNTRY ELEVATORS AT INDIAN HEAD—BIRTHPLACE OF GRAIN
GROWERS' MOVEMENT—SASKATCHEWAN.

*By courtesy of
Canadian Pacific Railway Co.*

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as homesteaders went into the prairie country, and the acreage under grain was increased. By 1910—a year memorable in the history of the movement for the many interviews which grain growers' associations had with Sir Wilfrid Laurier, when, as Premier, he made a tour of the west—there were 196 local associations in Manitoba, with nearly 9,000 members. In Saskatchewan there were 263 local associations with 6,000 members; and in Alberta there were at that time 183 local branches of the United Farmers, with an aggregate membership of 8,500.

East of Port Arthur nothing had been known of the grain growers' movement in the prairie provinces until the autumn of 1905, when representatives of several of the associations appeared before the Tariff Commission at Winnipeg and Regina to protest against a tariff with protective duties as high as those of the Dingley Tariff, which was being pressed upon the Dominion Government by the Canadian Manufacturers' Association. Nothing more was heard in Eastern Canada of the movement in the west until Sir Wilfrid Laurier made his tour of the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia in July and August of 1910, and was compelled by the pressure of the grain growers to accept the overtures for reciprocity that were made by President Taft in the winter of 1910-11.

Politicians at Ottawa, and people in the east from Toronto to Halifax, then awoke to the fact that a new spirit was possessing and actuating the people of the west; that the west had demands that it was intent on pressing on Parliament; and that these demands were embodied in the programmes of the grain growers' associations. From 1910 onwards public attention has been riveted on the grain growers' movement to an extent without parallel in the history of the Dominion. Success has followed success. Some of these successes—as for instance those in connection with the public ownership of line elevators—have been achieved in provincial politics. They have been won at Winnipeg, at Regina, and at Edmonton. Others, such as the impelling of the Laurier Government to commit itself to reciprocity, and of the Borden Government to the ownership of terminal elevators at Port Arthur, Port Nelson, and Vancouver, and storage elevators at Moose Jaw, Saskatoon, and Calgary, have been achieved at Ottawa.

With these obvious successes in provincial and dominion politics, and with the continuous increase in the area under grain in the prairie provinces, that is the most beneficent of all the contemporary developments in Canada, there has come great increase in the strength of the grain growers' associations. At the end of 1914 they had an aggregate membership of 42,000; and in the *Grain Growers' Guide*, which was started in 1908, the grain growers' movement has the most effective journal of propaganda ever published in any of the oversea dominions.

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Only the successes of the grain growers' movement that directly affect the handling and marketing of grain can be followed in this article. The part the movement has had in reducing or preventing the increase of protective duties in the Dominion tariff, in making an end to bounties to the iron and steel industry (a system in existence from 1883 to 1911), and in forcing the Laurier Government in 1911 back to the old position of the Liberal Party on the question of reciprocity with the United States, is of much interest in the political and economic history of the Dominion.

It is more than interesting. It is inspiring, especially to students of contemporary Canadian politics, who are convinced that the day must soon come when democracy in Canada will re-assert itself; when democracy will count for something in the life of the Dominion at other times than on election day; when Canada will cease to be, with the sole exception of South Africa, the least democratic of all the English-speaking countries; and when the forces of organised capital will no longer have things so entirely their own way as they have had during the half century since confederation. But all this is part of the political and economic history of the Dominion, and here I am concerned only with the extent to which the Dominion Government, and three of the provincial Governments, have embarked in the handling and storage of grain as a direct result of the grain growers' movement that had such a small beginning at Indian Head in 1901.

Public ownership of line and terminal elevators was advocated from the time the first association of grain growers was established. This question was unsuccessfully pressed upon the Royal Commission on the grain trade of 1906, and it was 1908 before any great headway had been made. In November of that year there was a conference at Regina between representatives of all the grain growers' associations and the Premiers of Manitoba, Saskatchewan, and Alberta, who at that time constituted an Inter-provincial Council. The request then made was that the provincial Governments should take over and operate all the line elevators. The Premiers—Messrs. Roblin, Scott, and Rutherford—answered that the matter was not one that could be handled by the three provinces acting together, but that each province must decide upon its own policy.

Sir R. P. Roblin, who has been Premier of Manitoba since 1900, showed little disposition to comply with the grain growers' demand, and when the provincial legislature met at Winnipeg in January, 1909, he intimated that the legislature had no power to authorise the Government to take over elevators and operate them as public utilities. The grain growers' associations refused to accept this statement as final. In ordinary years the annual convention is held in January, but that for 1910 was called six weeks earlier in order that the elevator question might be reconsidered before the provincial legislature met. The convention was held at

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Brandon in December, 1909, and while it was in session Sir R. P. Roblin sent word that in the 1910 session of the legislature he would introduce a Bill providing for Government ownership of elevators and creating a commission to manage them.

This quick change of front on the part of the Roblin Government is easily explained. A general election for the province was approaching. It came in June; and, moreover, in the autumn of 1909 there had been a by-election, at which a Government candidate had been defeated by a nominee of the grain growers' associations. In the session of 1910 the Premier kept his promise. The Manitoba Elevator Act was passed. An appropriation was made for the purchase of elevators and for building others; and a permanent commission, with three members, was subsequently named by the Government to carry the Act into effect.

In the first year a little over one million dollars—\$1,001,342—was expended in buying one hundred and sixty-six elevators, building ten new elevators, remodelling some of those that had been acquired as going concerns, and organising the new system. The year of the Manitoba Elevator Commission necessarily coincided with that fixed by the Dominion grain code. It ran from September 1st to August 31st, and in the year 1910-11 the commission incurred a loss of \$84,000. This loss was reported to the legislature in March, 1912; and in July the Roblin Government, which had never had any enthusiasm for Government-owned elevators, and which had already made a partial failure of operating a Government-owned telephone system, leased its one hundred and seventy-six elevators to the Grain Growers' Grain Company, of Winnipeg.

As its name implies, this is an organisation of grain growers—a co-operative organisation that came into existence in 1907 to help to free grain growers from conditions on the Winnipeg Grain Exchange of which serious complaint had been made when the grain growers' movement was started in Saskatchewan in 1901. The Grain Growers' Grain Company, which now handles more grain than any other grain company in Canada, operated the elevators during the grain years 1912-13, 1913-14, and 1914-15.*

There is no feeling in Manitoba that the failure of the Roblin experiment is a blow to Government ownership. There is no such

* A net profit of \$151,080 on the year's operations of the Grain Growers' Grain Company, being approximately 20 per cent., was announced at the annual meeting in Winnipeg yesterday by President Crerar. A 10 per cent. dividend was declared and the balance placed to the reserve fund. During the year the company handled thirty million bushels of grain. The Manitoba Government elevators, handled by the company, showed a profit for the first time of over four thousand dollars. The year was in all the most prosperous in the company's history. The export business has been reorganised and placed on a profitable basis.—*Gazette* (Montreal), November 5th, 1914.

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feeling, because, as Miss Cora Hind, the grain expert of the *Free Press*, of Winnipeg, asserts in *Industrial Canada* for September, 1912:—

The Manitoba scheme was never in any true sense a test of Government ownership. The commission had not a free hand in the buying of the elevators, and they were not free from Government interference at any time during the two years the system was in operation. The salaries paid the members of the commission were exorbitant, and the whole scheme was carried on in the most extravagant manner possible. The few elevators which were erected by the commission on plans approved by the Grain Growers' Association cost exorbitantly. In fact, to the casual layman looking on from the outside, it would seem as if it had been the fixed determination of Premier Roblin, while granting the request of the farmers, to send "leanness into their souls."

Although the elevators are held by the Grain Growers' Company only on a short lease, it is inconceivable that they will go again into private hands, that there will be in Manitoba a reversion to conditions as they were before 1910.* Complete abandonment of public ownership in Manitoba is inconceivable, because since 1910 the Governments of Saskatchewan and Alberta and the Dominion Government have all been committed to public ownership of these public utilities; and conservative and reactionary as Manitoba obviously is in some aspects of its public life, it will not be permitted to side-step a movement in the economy of the grain trade which has made such extraordinary headway since 1908.

The Governments of Saskatchewan and Alberta, unlike that of Manitoba, did not hesitate to accept the principle of public ownership of line elevators. They moved, however, with due deliberation, taking much counsel with the grain growers; and they finally adopted similar plans that have worked out much better than the hurriedly-adopted plan of the Manitoba Government. In the session of the Saskatchewan Legislature that followed the conference at Regina between the Interprovincial Council and the representatives of the grain growers—the conference held in November, 1908—a resolution was adopted in favour of public ownership. The grain growers of Saskatchewan and Alberta held their annual conventions in January, 1910, when there was an announcement from Mr. Walter Scott, who has been Premier of Saskatchewan since 1905, that a Royal Commission was to be

* NEW CO-OPERATIVE POLICY.—Secretary R. McKenzie, of the Manitoba Grain Growers' Association, addressed a meeting of the Valley River branch last Saturday evening on the subject of co-operation and collective buying. He explained the policy of the Grain Growers' Grain Company in relation to making their elevators a distributing centre in each community for the supplying of commodities that admit of carload shipment and also having the operator look after the shipment of all farm produce as soon as the Farmers' Market in Winnipeg gets properly established. He pointed out at length the possibilities for good to the agricultural classes involved in this policy, if properly developed, and emphasised the necessity of having strong organisations of farmers at each point so as to permit of the new enterprises of the grain growers' movement being made a success.—*Grain Growers' Guide* (Winnipeg), September 23rd, 1914.

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appointed to report on the best scheme for public ownership; and an announcement from Mr. A. C. Rutherford, then Premier of Alberta, that as soon as a satisfactory plan was submitted by the grain growers it would be accepted by the Government at Edmonton.

The Saskatchewan Commission was at once appointed. Its chairman was Dr. Robert Magill, since 1912 head of the Dominion Grain Commission, but in 1910 professor of political economy at Dalhousie University, Halifax, Nova Scotia. Dr. Magill's associates were Mr. George Langley, now Minister of Municipalities in the Government at Regina, but in 1910 prominent in the grain growers' movement; and Mr. Fred W. Green, who was then as now secretary of the Grain Growers' Association of Saskatchewan.

The commission reported at the end of October, 1910. Its report embodied an exhaustive survey of the conditions under which the grain of the province was at that time handled and marketed, including an examination of the charges long preferred against the line elevators, and also of the plan of Government ownership that had been adopted in 1910 by the province of Manitoba. The commission reported against the Manitoba plan, and urged that a solution of the elevator problem satisfactory to grain growers must give the grain growers full control of the system.

Under the Manitoba plan local grain growers had no control and no responsibility for the success of an elevator after they had petitioned the commission to establish it. All the responsibility was carried by the Government. The Saskatchewan Commission was unanimous in holding that no elevator was likely to be a financial success unless a considerable number of grain growers had a direct personal interest in it and some responsibility for its success. The commission, moreover, agreed that the solution of the problem must be sought along the lines of co-operation by the grain growers themselves, assisted by loans from the provincial Government. They accordingly recommended that legislation should be enacted for the creation of a co-operative organisation of grain growers on the principle of the maximum amount of local control consistent with the ownership by the whole body of shareholders, and management through a central board of directors. The commission held that the managing body should be wholly elected by the shareholders, and should be free from interference from the Government. They recommended that shares in local elevator companies should be of the value of \$50 each, with not less than 15 per cent. paid up, and that the maximum number of shares held by one person should not exceed ten. The shares subscribed in each local company should be equal to the cost of the proposed elevator; and it was further recommended that the Government should furnish 85 per cent. of the cost on loan, secured by a mortgage on the elevator.

"It is the opinion of the commission," continued the report,

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"that the interest on the paid-up capital should be limited; and that if possible the profits of the company should be distributed on the co-operative principle, according to the business offered by each member to the company." The organisation of twenty-five local companies was recommended by the commission as necessary to the starting of the scheme; and it was further recommended that for purposes of preliminary organisation the executive committee of the Saskatchewan Grain Growers' Association should be the provisional directors of the central company, and that the Government should make a special grant to the executive committee to cover the expenses of organisation. The final paragraph of the report is as follows:—

The commission are not opposed to the principle of public ownership of public utilities, but they consider that provincial competition with private companies in the matter of initial storage is subject to conditions which would invite failure, and that such a scheme in any case would be limited in the scope of the service it could do for the growers of grain. The commission would have little objection to an experiment by the province were it not for the fact that an experiment upon a large scale is being conducted by the province of Manitoba. If Saskatchewan would make an equally serious attempt to develop a co-operative solution of the problem, western farmers would soon be in a position to avail themselves of the best results of both experiments. Both plans aim at removing initial storage from the ownership of companies interested in trading grain. The one plan aims at the ownership by the State and management by the Government, and the other aims at ownership and management by the growers of grain. Both plans recognise the strength of the feeling of injustice in the minds of many farmers, both seek to create conditions for the marketing of grain which will give the farmers confidence and satisfaction, and both involve financial aid by the State. The chief difference between the two plans is that in the one the issue is in the hands of the Government, while in the other it is in the hands of the farmers themselves, and to this commission, at all events, it appears that this difference is in favour of the co-operative plan. This plan avoids many of the risks and limitations of the other plans, and is pregnant besides with possibilities for the future.

It had been understood from the time the commission was appointed that its report and recommendations were to be made before the end of 1910, so that they could be discussed at the annual convention of the grain growers of Saskatchewan for 1911, and acted upon at the 1911 session of the provincial legislature. The convention was in session on February 7th, 8th, and 9th. Over seven hundred delegates from local grain growers' associations were in attendance, and the report of the Elevator Commission was under discussion for nine hours.

The recommendations were not of the kind expected by a large number of grain growers, and a resolution was proposed which declared that in the opinion of the convention the finding of the commission is "not in accordance with the expressed wishes of the farmers of Saskatchewan, and that this convention is in favour of a system of Government-owned interior elevators."

It was recalled by speakers who supported this resolution that at the annual convention at Weyburn in 1909, and at Prince

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Albert in 1910, the grain growers of Saskatchewan had unanimously voted in favour of Government ownership, and complaint was made that the Elevator Commission had not confined itself to schemes on municipal ownership lines. At this time—February, 1911—it was known that difficulties were attending the working of the Government line elevators in Manitoba, and that the undertaking was not succeeding. But advocates of Government ownership at the Regina convention insisted that grain growers in Manitoba had not been taken into counsel when the Roblin Government embarked in the venture, and that there were inherent weaknesses in the plan that made success doubtful from its adoption. The weakness most emphasised was that the Manitoba Elevator Commission was not endowed with power to buy and sell grain.

It fell to Mr. George Langley to defend the recommendations of the Saskatchewan Commission. Speaking as a member of it, he declared that the commission had become convinced that it was not the business of the Government to market grain. That was one reason why it did not recommend straight Government ownership. Another reason was that it was apprehensive that politics might enter into the working of a Government-owned system of line elevators. The appointments to the Manitoba Commission, Mr. Langley stated, had been political. Politics, in fact, would inevitably enter into the working of a Government system. Ultimately, an amendment was moved accepting the report of the Magill Commission. It was carried by a large majority; and in March, 1911, an Act was passed by the legislature incorporating the Saskatchewan Co-operative Elevator Company Limited on the lines recommended by the commission.

The Bill before being read a first time in the legislature was submitted to the executive committee of the grain growers' association. Amendments were then suggested, one of which extended the powers of the elevator company to enable it "to do all things incidental to the production, storing, and marketing of grain." This was an enormously wide extension of its powers, but the amendment was accepted by the Government and embodied in the Act. The provisional board of directors was organised as soon as the Act had received the Royal Assent. Agents were appointed to sell shares, and by July 6th, 1911, forty-six locals had been established, and 8,000 shares had been taken up by 2,580 grain growers.

Types of elevators were next determined upon by the board of directors, and between July and November forty elevators were erected. Six elevators were purchased, and by the end of 1911 forty-six elevators were in operation. Careful weighing and separate binning were conditions long sought by grain growers, and in deciding on the type of elevator the directors were careful to secure these two conditions.

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The elevators built by the company in 1911 and subsequently are of two sizes rather than two types. The thirty-thousand bushel type contains fourteen car-load bins—bins that will hold two thousand bushels of wheat or a little over one thousand bushels of oats; two bins of two car-load capacity; and two of four car-load capacity. In the forty thousand bushel elevators there are sixteen car-load bins, four two car-load bins, and two large bins for what is known as street wheat—wheat that is sold from the farm wagon at place of shipment, as distinct from wheat stored by the growers in local elevators, and then sent to the terminal elevators at Fort William and Port Arthur after inspection and grading by officers of the Dominion Grain Commission staff at Calgary or Winnipeg. Gasoline engines are used as power for working the elevator legs, legs with a lifting capacity of two thousand bushels an hour; and also for working the cleaning machinery by which grain can be screened at a rate varying from 1,250 to 2,500 bushels an hour according to the arrangement of the screens. In each elevator there are machines for weighing the grain as it is received and as it passes out again into the railroad cars.

Forty-six elevators built on these plans were in service when the Saskatchewan crop of 1911 was on its way to market; and when the directors made a report to the grain growers' convention at Regina on February 14th, 1912—made to the association as the parent of the co-operative elevator company—they stated that two million bushels of grain had already gone through the company's elevators. From its inception the company used the power to purchase grain conferred on it by its charter; and it was reported to the Regina convention of 1912 that of the two million bushels received at the elevators in the first five months of the grain year 1911-12, about half had been purchased and the other half specially binned for the growers.

Owing to adverse conditions that characterised the crop of 1911, there was a greater diversity of grades than in normal years. These conditions made difficulties for the new company, but in spite of them it was claimed by the directors that it had been able to exert a good influence—from the grain growers' point of view—on the price paid for grain at many places in Saskatchewan. "Not only has it been able to pay higher prices for grain of the poorer qualities than was ever paid before," continued the report, "but it has also been the means of higher prices being paid by its competitors, who certainly do not allow themselves to be overbidden by the company."

It had been objected in the years from 1908 to 1910 that grain growers would not support a line elevator owned and managed on a co-operative basis. The directors recalled these objections, and added that so far as their experience had gone shareholders had been loyal to the co-operative elevators in spite of tempting bait held out by competing elevators in the form of higher prices, higher

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grades, or reduced handling charges. "The grain growers know," continued this part of the report, "that if our competitors offer better terms than our own company can they must be recouping themselves by means of some of the time-honoured methods with which all farmers are familiar from past experience."

Finally, at this convention in Regina in February, 1912, which witnessed the realisation of an ideal for which Saskatchewan grain growers had been working since the epoch-making meeting at Indian Head in 1901, there was an appeal from the elevator company to the grain growers to do their part in making the company a success. It read:—

The company was created to give practical effect to a special ideal in the work of marketing grain. This ideal, briefly, is entirely to eliminate the unnecessary profits of the middleman by the establishment of a farmers' company, so organised as to enable the farmer to preserve the identity of his own grain until it reaches the market, and at the same time capable of being extended over the whole province along co-operative lines. Into such a business two factors are bound to enter, the commercial and the ideal; the commercial factor emphasising the necessity of making the business succeed financially in order that the financial interests upon which the company relies for credit to conduct its business may not be antagonised. This factor, if unduly developed, would tend towards making the company merely a dividend producer for the sake of its shareholders, and would reproduce in another form the very evil it was intended to destroy. The best way to prevent such an undesirable outcome is to foster the other factor, the ideal which brought the company into existence, and is, in fact, its most vital force. The most effective method of keeping this ideal in its proper place in the development of the company is to maintain the closest and most friendly relations between the company and the grain growers' association. In this matter the association can render a distinct service to the company, and the company should undoubtedly be able to render an equally valuable service to the association by means of the important practical information it will be able to supply regarding the various problems connected with the marketing of our grain. The association, then, has its great work of organisation, education, and agitation; and the company the equally great work of giving practical effect to the commercial and co-operative ideals of the association, both institutions being branches of one united farmers' movement, having for its object the social and economic uplift of the farming industry.

The response from the grain growers in Saskatchewan to this appeal of February, 1912, has been generous. Members have more than trebled in numbers since the first report was made to the Regina convention, and they have been continuously loyal to the co-operative idea. In the first year there were, as has been stated, forty-six locals, and 3,261,000 bushels of grain were handled at the company's elevators. In 1912-13 there were 140 elevators, through which 13,000,000 bushels of grain were passed; and in the grain year 1913-14—the year which ended on August 31st last—there were 192 co-operative elevators, from which 22,000,000 bushels of grain were started eastward on the way to market.

The company's charges for services at the elevators, and for the sale of grain, are the same as those of the privately-owned elevators and grain commission men. Users of the elevators are

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generally shareholders, to whom since 1912 dividends have been paid at the rate of 6 and 8 per cent. Shares of the value of \$1,514,350 had been issued up to the end of July, 1913, of which amount 15 per cent had been paid up. The loans from the provincial treasury, advanced under conditions defined in the Act of 1911, amounted to \$1,311,253. So far the company's service has ended at the head of the lakes. It is, however, considering a plan for carrying grain right through from Saskatchewan to London and Liverpool, and its directors are hopeful that by this extension of its operations it may secure for the grain growers some part of the price that now goes to middlemen.

Mr. Alexander Rutherford was Premier of Alberta in 1910 when the pledge was given to the United Farmers that as soon as they could agree on a plan for public ownership of line elevators the Government would enact legislation to carry it into effect. Early in 1912 Mr. Arthur L. Sifton succeeded Mr. Rutherford as Premier. The new Government at Edmonton was quite ready to fulfil the pledge that had been given to the grain growers; and in the session of 1913 an Act was passed incorporating the Alberta Co-operative Elevator Company Limited, with the executive board of the United Farmers as provisional directors.

The Act follows in almost every detail the lines of the Saskatchewan Act, and is quite as wide in scope as the measure under which the Co-operative Elevator Company of Saskatchewan was organised. The Alberta company is given power to construct, purchase, or lease line elevators—sometimes described as country elevators to distinguish them from storage, terminal, or transfer elevators—and also to buy and sell grain, and deal in all commodities required by grain growers. In the charter there is also a clause which provides that the company may distribute profits in accordance with the co-operative principle, after 8 per cent. dividends have been declared on the paid-up capital stock.

Twenty locals had to be organised before the Act could go into effect. It was July, 1913, before this number was secured; but when the year ended, and the first annual meeting of the company was held at Calgary on August 19th, 1913, the directors were able to report that forty-six locals had been established, and that there were then 3,500 shareholders. At this time all the elevators were in building; but when the United Farmers held their annual convention in January, 1914, it was reported that fifty locals had been organised, that there were 5,230 shareholders, and that all the elevators then in service were doing a good business.

There was some discussion at this convention of the practicability of applying the Rochdale principle of co-operation to the handling of grain, as well as to the merchandising business to be done by the Alberta Elevator Company. Mr. E. J. Fream, the secretary-treasurer, in recalling discussions on this question at meetings of the board of directors, stated that, while they strongly approved of the

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application of the principle to all departments of the business. they found that to apply it to grain handling would require so much bookkeeping that all the profits would be used up in deciding which grain grower patrons of the elevators were entitled to them. Mr. Fream continued:—

The first principle of the co-operative distribution of profits, as it was applied in England, was that a reasonable interest should be given to the investor on his capital. The Act incorporating the company provided that not more than 8 per cent. should be paid, which he considered was reasonable in Alberta. Then a reserve fund had to be created to provide against possible future losses. This was also required by the Act. The third principle was that the remaining profits should be divided among the patrons in proportion to the business done. That was a good principle, and the company proposed to put it into practice with regard to other lines of goods. But so far they could not see how it could be done in connection with grain. There were eight different ways in which the company handled grain—purchasing by wagon load, handling through specific bins, storing on grade certificate, consigning on commission, buying on track, and so forth. So far no scheme had been devised which would enable the distribution of profits on the basis of patronage, when so many different methods were employed; but if anyone could devise such a scheme that would not entail an unreasonable amount of bookkeeping he would be glad to recommend its adoption to the directors of the company.

By the end of the grain year 1913-14—the year that ended on August 31st, 1914—the number of locals in Alberta, each with an elevator, was eighty-two. There were then 7,900 shareholders in the Grain Growers' Elevator Company, and during the grain year four million bushels of wheat, oats, barley, and flax had gone through the company's elevators.

It will already have been inferred that public ownership line elevators in Manitoba, and co-operative elevators in Saskatchewan and Alberta, are in competition with line elevators owned by grain-dealing companies. As yet, and as must be the case for some years to come, public elevators are greatly outnumbered by elevators worked on the old system that had its beginnings in Manitoba in the later eighties of last century, when the railways would not build country elevators, but sought to give a monopoly to capitalists who had embarked in a business that should never have been permitted to go into private hands. It should not have gone into private hands, because the line elevators, through which grain is transferred from the growers' wagons to railway cars, are nearly as essential to the transport of grain as are the railways over which it is carried from the prairie country to the head of the lakes at Fort William and Port Arthur. During the grain year 1913-14, of the 698 line elevators in Manitoba 176 were owned by the provincial Government and operated by the Grain Growers' Grain Company. Of the 1,246 elevators in Saskatchewan—the largest of the grain growing provinces—192 were co-operative elevators; while of the 321 in Alberta 82 were of the co-operative system that was established as recently as 1913.

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The grain growers had brought the Governments of the prairie provinces into line on public ownership of country elevators before they began their short and successful campaign for public ownership of terminal elevators at Fort William and Port Arthur. Geographically these cities are of the prairie provinces. They are at the gateway to the west. Politically they are of the province of Ontario, which stretches from the Ottawa River to the Lake of the Woods. But the grain growers never contemplated the ownership of terminal elevators by the Ontario Government. They have no connection with the Government at Toronto; and from as early as the winter of 1906-7, when the Royal Commission on the grain trade was in the west, their demand was that the terminal elevators at the head of the lakes should be taken over by the Dominion Government, and that the Dominion Government should build similar elevators at Port Nelson, the terminus of the railway now in building that connects Le Pas, Manitoba, with Hudson's Bay; and also at Vancouver, which must become an important grain port as soon as the Panama Canal is open. Large storage elevators were also desired by the grain growers at Calgary and other interior points, at which grain could be held when there is pressure on the railways or at Fort William and Port Arthur, and during the winter when navigation is closed and only small quantities of grain are being moved eastward over the Canadian Pacific to St. John.

The demand of the grain growers that the Dominion Government should go into the business of storing and handling grain was first made in the summer of 1910, when Sir Wilfrid Laurier was on a political progress through the prairie provinces. It was pressed upon him by deputations from grain growers' associations at every stopping place in the seven hundred and fifty miles of railway journey from Winnipeg to Calgary; and again on December 16th, 1910, when a deputation of five hundred grain growers from the country beyond the Great Lakes waited on the Premier at Ottawa. Three hundred farmers of Ontario, members of granges or kindred organisations, were also of this deputation, which had been organised by the Canadian Council of Agriculture, and was so large that the only hall in which it could be received was the Chamber of the House of Commons.

The resolution submitted to the Premier at Ottawa had been drawn up by the Council of Agriculture. It declared that the council was convinced that terminal elevators as then operated were detrimental to the interests of both producer and consumer, and that it accordingly requested that the Dominion Government should acquire and operate as a public utility, under an independent commission, the terminal elevators at Fort William and Port Arthur, and immediately establish similar terminal facilities on the Pacific Coast, provide the same facilities at Hudson's Bay when necessary, and also provide such transfer and other elevators as were necessary to safeguard the quality of export grain.

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Sir Wilfrid Laurier, who has never been favourable to Government ownership and operation of public utilities, was cautious in reply. He said:—

We have always understood that in the west ideas are far more radical than they are in the east. I do not complain of this, but simply place it as a basis of fact. The resolutions you have put before us are certainly impregnated with the western spirit. Nor do I believe that the farmers of the east are prepared to go quite so far as you gentlemen of the west. You are in favour, as I understood, of the Government ownership and operation of all public utilities—of railways, abattoirs, and elevators. As to this I have nothing to say at present. The idea may perhaps be a good one. I understand that you have started a campaign of education, and perhaps I may be the first to be educated in that respect, because up to this time I have not been an absolutely ardent supporter of Government ownership and operation of all public utilities. To Government ownership I may be persuaded; to Government operation I may be persuaded also, but with greater difficulty. In this I am a man of the east.

Parliament was in session at the time the deputation of December 16th—the largest and most representative deputation that ever waited upon Ministers at Ottawa—laid its case before Sir Wilfrid Laurier; and later in the session—February 17th, 1911—the grain growers' case was brought before the House of Commons by Dr. F. L. Schaffner, a Conservative member from Manitoba, who moved a resolution in favour of Government ownership. Dr. Schaffner reminded the House that, notwithstanding the fact that the Government employed ninety-five inspectors at the head of the lakes, at salaries aggregating \$61,000 a year, to prevent sharp practices, degrading of grain had been extensively carried on. He was convinced that, even if there were five hundred Government inspectors, mixing of grain could not be prevented so long as elevators were in the hands of companies making a profit out of them.

On a party vote the resolution was defeated. There was, however, at this time—February 17th—a Government Bill before the Senate amending the grain code, in which there was a clause providing that the Governor-in-Council might authorise the Minister of Trade and Commerce to construct, acquire, or expropriate any terminal elevator, if Parliament had granted money for the purpose. This was as far as the Laurier Government was prepared to go in 1911, and the Bill failed for lack of time. In September the Liberals were defeated at the general election on the Reciprocity Bill, and in October the Borden Government came into power.

It was obvious when the Reciprocity Bill was before the House of Commons that the Conservative Party would force the Government to go to the country on this issue. Mr. Borden (now Sir R. L. Borden) then made a political tour of the prairie provinces, as Sir Wilfrid Laurier had done in the previous summer. He was waited upon by many deputations from grain growers' associations; and at Brandon, Manitoba, on June 21st, 1911, he committed himself and the Conservative Party to the principle of Government

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ownership and operation of terminal elevators. He said to the grain growers' deputation:—

It seems to me that Government control and operation of the terminal elevators is the only effective means of putting an end to the grievances of which you farmers have complained. We are prepared to stand for that. I realise that it is a tremendous step, and one that may subject me and those of the Conservative Party who stand with me to some criticism and opposition. Yet I think the principle involved and justice to the western farmer will warrant us in taking that progressive step.

At Red Deer, Alberta, and other places, Mr. Borden was equally sympathetic in his replies to the grain growers' memorials; and in his manifesto of August 14th, 1911, issued after the dissolution of Parliament, he pledged his party to the ownership and operation of terminal elevators by the Dominion Government. During the campaign candidates in the western provinces were called upon by the grain growers for pledges in favour of Government ownership; and soon after the Conservative Government took office the Dominion Millers' Association met in Toronto—December 14th, 1911—and adopted a resolution urging the new Government to fulfil the pledges made by Mr. Borden, and thus to make an end to the "advantage elevator owners now have over all other grain interests."

Provision for Government elevators was made in the new Grain Act of 1912, by which the Dominion Grain Commission was created; and while the Borden Government did not see its way to buying out all the public elevators at the head of the lakes, as the grain growers and millers had urged it to do, it made a contract in the summer of that year for the building of an elevator at Port Arthur, which went into service on October 16th, 1913. The new elevator has a capacity of 3,250,000 bushels. Additional units can be added as business demands. There is also room on the site for railway sidings and wharfage for an elevator of 10,000,000 bushels capacity. The largest elevator as yet at the head of the lakes—that of the Grand Trunk Pacific Railway Company—is of six million bushels capacity.

The Government elevator, like all the large elevators erected at the head of the lakes since 1910, is of reinforced concrete. It is equipped to receive twenty cars of grain at a time. On an average it takes half an hour to unload a car of grain, so that forty cars an hour can be handled at the elevator. The wharf, at which two of the largest grain carriers can be loaded at once, is 1,200 feet long. The normal loading capacity into steamers is about 75,000 bushels an hour. The working house, where the grain is transferred from the cars, where it is weighed and cleaned, and whence it is transferred to steamers or railway cars for its journey eastward, towers 185 feet above the level of the harbour. The bins are circular. There are seventy-five of them in the working house, each of 7,000 bushels capacity. In addition, there

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are fifty-six interspace bins of 3,000 bushels capacity. In the storage house there are seventy circular bins, each 24 feet in diameter and 90 feet high, with a capacity of 30,000 bushels, giving a total capacity on the storage side of 2,500,000 bushels. The total capacity of working house and storage house is thus 3,250,000 bushels—equal to 1,625 car loads of wheat.

From October 16th, 1913, to March 5th, 1914, a little over seven million bushels of grain were handled at the new elevator; and on March 13th, when the vote for the Dominion Grain Commission came before the House of Commons, Sir George E. Foster, Minister of Trade and Commerce, made his first statement on the Government's experience in operating a large terminal elevator. He said:—

The operation of the elevator has been about as nearly perfect as the operation of an elevator could be. Government operation has been of service to the whole grain business, because the Government and its officers have got that knowledge with regard to actual operation that they never could have got by the supervision of an elevator owned and operated by someone else. It has enabled the Grain Commission and the Government officers, by being on the inside of the operations, to get a knowledge of them that they did not possess before. That knowledge is not only good in itself, but it is valuable as a means of checking other elevators that are under the supervision of, but are not owned and operated by, the Government. It is safe to say that the Government never could absolutely control the whole situation until it went back alongside the farmer, and took possession of all the means of storage and transit of grain from the country elevator clear to the other side of the ocean, where the grain finds a market. The whole matter of Government elevators, internal and terminal, and the operation of these elevators, is in the experimental stage. We are putting our money into it, and a good deal of brains and a good deal of application, in order to see how it will work out. It may not succeed to the extent of fulfilling the anticipations of all its farmer friends, but I am certain that it will succeed so far as to establish itself as a beneficent force in the operation of the Grain Act.

Western members who are in sympathy with the movement of the grain growers' associations for Government ownership and operation of all public elevators pressed Sir George Foster as to how far the new policy of the Government was to be extended.

The Minister of Trade and Commerce answered:—

At present it is the intention to test the matter of Government terminal elevator operation at the head of the Great Lakes, to test the system of internal storage elevators at certain strategic points in the west, and to test the terminal situation at Hudson Bay and on the Pacific coast. We proceed by steps. If this thing, working over two or three years, approves itself to the Government, or to the people as represented in this Parliament, then the question will arise as to whether it should be extended, to what degree it should be extended, and how.

The elevators that were built for the Government in 1913-14 at Saskatoon, Moose Jaw, and Calgary are to be of about the same capacity as that at Port Arthur. Until these elevators came into service in October, 1914, there were no large public storage elevators in the grain growing country west of the lakes. The elevators at railway stations—the country elevators at which the

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grain grower does his business—range in capacity from 5,000 to 45,000 bushels, and at most of them there is no equipment for cleaning the grain. The Government elevators are equipped for cleaning as well as storing grain. Grain growers using these elevators will consequently save the freight charges on weeds and other refuse in the grain shipped to the head of the lakes, or, after the Panama Canal is opened, to Vancouver.

The transfer elevator at Port Nelson, which was in building in 1914, is to be part of the terminal equipment of the Hudson Bay Railway. So far in the history of the grain trade of the Dominion only a very small quantity of grain has been shipped to the United Kingdom by way of Vancouver. There are no elevators at British Columbia ports, and when grain is shipped from Vancouver it is transferred from the railway cars into bags, and so loaded into steamers or sailing vessels. But the expectation at Vancouver and also at Calgary is that when the Panama Canal is open a large quantity of grain from Alberta will go by Vancouver and Panama; and the Government elevator at Vancouver, in building in 1914-15, is to facilitate this business.

Parliament in the sessions of 1912, 1913, and 1914 appropriated in the aggregate six million dollars for storage and transfer elevators at centres of the grain trade west of Fort William. It will need the experience of two or three grain seasons to prove how this new undertaking of the Dominion Government will succeed, and how far Government ownership of elevators will forward the interests of the grain growers. If a satisfactory measure of success result, as now seems most probable, Government ownership will undoubtedly be greatly extended; for the grain growers' organisations are now on a permanent basis. They are essential to the success of grain growing; and while they are non-political in that their members are drawn from both Conservative and Liberal parties, their influence must be much greater in the future than it has been in the past, because after the next general election, which will come in 1915, the grain growing provinces will have forty-three members in a House of Commons of 234 members, as compared with twenty-seven in a House of 221, the number in the years from 1910 to 1914, when the grain growers' movement first began to be a factor in legislation at Ottawa.



What Co-operative Dairying has done for Denmark.

BY J. J. DUNNE.

Le sol c'est la patrie; cultiver l'un c'est servir l'autre.

THE earliest trace of dairy progress in Denmark was in 1830, when the estated gentlemen imported Holstein cattle and sought to improve Danish dairy methods by introducing Holstein dairymen and dairy methods in their so-called manorial dairies. Certain reforms followed the introduction of Holstein methods, amongst others the practice of having cows calve early in winter and of feeding them well with home-grown cereals and rape cake. This practice was imitated by many of the large farmers, who perceived the wisdom of producing good winter butter, that could be readily and profitably sold on the English market. In the course of the forties and fifties the butter produced by the manorial dairies improved so much in quality as to be able to compete with the best foreign butter on the English market. This, however, did not apply to Danish butter in general (mast-butter),* which had a bad reputation in England, and in order to avoid the English prejudice against Danish butter the manorial dairies shipped their butter *via* Kiel or Hamburg under the name of "Kieler-butter."

An agricultural body, founded in 1769, and called "the Danish Society of Agricultural Economy," instituted a two years' course at several manorial dairies in 1837 for the daughters of farmers; and in the course of a few years many efficient dairymaids were scattered over the country. The same body instituted a course for cattle feeders (*i.e.*, workmen who specialise the feeding of live stock) in 1854, and temporarily appointed the late Professor Segelcke as a dairy expert in 1860. Professor Segelcke thoroughly investigated Danish dairying, and submitted with his report certain measures of suggested reform. The Society adopted the report, and on a later date the Professor received notice of his permanent appointment.

PROFESSOR SEGELCKE'S WORK.

The pioneer dairy expert addressed his first efforts to the manorial dairies. In those days the only thing weighed in the dairy was the butter. The milk was guessed, or indifferently measured; salt, colouring, &c., were added according to taste—

* Semi-putrid butter used by seamen for smearing masts, tackle, &c.

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nobody thought of weighing or measuring these things, and, although a thermometer was available here and there, the temperature of the milk was generally ascertained with the naked hand. As a chemist and analyst, Professor Segelcke was quite convinced of the necessity of weighing and measuring, but it was no easy task to get the dairy workers round to his views. At all



PROFESSOR SEGELCKE,
Who reformed the Danish Manorial Dairies.

events, he set to work, and reformed the rule-of-thumb methods. On many of the large estates he successfully adapted double-entry bookkeeping to farming accounts; he wrote many helpful books and pamphlets about dairying and farming accounts; and in 1865, when he succeeded in organising centres where young farmers could be trained as dairy experts, he published a booklet called *Guidance in Butter-making for Smallholders*. Nine young farmers qualified as dairy experts in 1865-6; 45 qualified in 1868-9; 114 qualified in 1872-3; and in 1876-7 the number increased to 189.

Professor Segelcke laboured energetically in order to have these experts appointed as itinerant teachers throughout Denmark. His

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advice to the experts was: "Teach the small farmers to get more out of their milk; give them an opportunity of ascertaining the value of milk and dairy work, and improved stock-breeding and agricultural methods will follow of their own accord."

The first exhibition of winter butter, which took place on January 29th, 1868, was due in a great measure to Professor



PROFESSOR NIELS JOHANNES FJORD,
Who instituted the itinerant experiments that made
Danish dairying a success.

Such earnest natures are the fiery pith,
The compact nucleus round which systems grow
Mass after mass becomes inspired therewith,
And whirl impregnate with the central glow.
—Lowell.

Segelcke's agitation in favour of winter dairying. Exhibitions of winter butter have taken place every year since, and are now quite general.

PROFESSOR FJORD'S EXPERIMENTS.

Agriculturists are by nature conservative, and in most instances refuse to adopt new measures until they have been convinced of their superiority. With regard to agricultural experiments this conservatism is, in a great measure, justified, as farmers have

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been known to experiment themselves out of house and home. The carrying out of agricultural experiments is not an individual but a national interest, as the aim of such experiments is to increase the wealth of the entire nation by directing agricultural enterprise into more productive and more economic channels. Such experiments are carried out in most countries on experimental stations,* and in laboratories, &c., but in general the counsel and co-operation of the people the experiments are designed to benefit are not sought in the practical work done outside the laboratory.

The Danish reformer, Bishop Grundtvig, recognised the interdependence of theory and practice, and advocated the use of both, so that they might mutually correct and complete each other. Their joint action he likened to two parallel forces moving towards the same goal; their joint effect upon the most menial labour uplifting, deepening, and broadening the knowledge of the worker, increasing his efficiency, and dignifying his most menial task.

Niels Johannes Fjord was the pioneer who materialised the Grundtvigian idea of harnessing science and practical knowledge, and applying their allied forces to the solution of dairy and agricultural problems.

The Society of Agricultural Economy appointed Professor Fjord as director of the series of itinerant experiments planned by himself. He was assisted by a staff of trained assistants, and the experiments were carried out on farms and dairies throughout Denmark, the State making a small monetary grant to the dairyman or farmer by way of compensation for the inconvenience caused by the experiments. The centre from which the Professor directed his experiments was the laboratory of the Royal Veterinary and Agricultural College, Copenhagen. He occupied himself with the most pressing problems, and succeeded in elucidating and establishing important data concerning the collection and preservation of natural ice and snow for summer dairying; the separation of milk; the butter returns with different churning methods; the best cream-testing apparatus; the best pasteurising apparatus; the advantage of refrigerating rooms in dairies, on board ships, and of refrigerating cars on railways; the nutrient values of roots, cereals, and oilcakes as feeds for dairy cows; the nutrient values of skim milk, cereals, roots, and oilcakes as fattening feeds for bacon pigs; the best thriving strains of pigs, &c. He obtained the active co-operation of the dairymen and farmers for his practical experiments. These men placed their staff, stock, machinery, intelligence, and valuable experience at the disposition of the Professor and his assistants for months and even years; in most cases accepting payment for direct expenses only. The scientific investigations and analyses in connection with the experiments were carried out at the State Laboratory in Copenhagen.

* There are six experimental stations for plant culture in Denmark.

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What were the advantages of Professor Fjord's policy of taking counsel with the people and of assisting them to solve their problems on their own farms and in their own dairies?

1. The itinerant character of the experiments gave a large number of dairymen and agriculturists an opportunity of observing at first hand Professor Fjord's well-conceived plans, his earnest, thoughtful nature; and the thoroughness and practical utility of his work. This personal touch won their confidence, interest, and respect, and intensified the moral and material benefit of the experiments.

2. The carrying out of Professor Fjord's schemes by the people for the people exercised—apart from their main object—a highly educative and self-helping influence upon the minds of the class whose interests they were designed to serve.

3. The novelty of the collaboration of science and actual practice for the solution of dairy and farm problems aroused and intensified local interest in the experiments, while the reports of the fifty odd Danish agricultural papers excited the general interest of rural Denmark.

4. When the dairyman or farmer became conscious that he stood in the limelight of the Danish agricultural press, with the responsibility of carrying out Professor Fjord's schemes placed upon him, he felt he was entrusted with a national duty, and responded nobly to the confidence reposed in him.

5. The experiments incidentally taught the agriculturists how to make snow, ice, air, water, steam, electricity, and oil motors assist them in their labours.

Professor Fjord's itinerant experiments began in 1875-6, and were continued until shortly before his death in 1891. His whole life-work lies in the fact that he taught the Danish people to get more cream out of each pound of milk, more butter out of each pound of cream, and a higher price for each pound of butter.

Of the two pioneers, Professor Segelcke was concerned chiefly with the development of dairying on the large estates and farms, while Professor Fjord's experiments contributed largely to the extension and development of dairying on the small farms.

DENMARK'S TRANSITION FROM CEREAL CULTURE TO DAIRYING.

During the seventies many railways were built across the American prairies, and enormous tracts of virgin soil were sown with corn, wheat, &c. This news made European cereal growers feel anxious about the future. As the preceding sketches indicate, Denmark took active measures during the seventies and eighties to ward off or lessen the effect of the new competition, so that the people were in some degree prepared for the violent fall in the prices of cereals which occurred in the eighties. Even as late as the middle of the seventies Danish cows were few and badly fed. When dairy cows are badly fed their milk yield becomes abnormally



A TYPICAL DANISH FARMER'S DWELLING 30 YEARS AGO,
NOW USED AS A BARN.



MODERN DWELLING OF A DANISH FARMER.

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low, and the liquid and solid manure contains but little of the plant fertilising elements. In those days Danish dairy cows received little or no oilcakes, bran, or cereals, feeds that not alone help to increase the milk flow, but also to augment very considerably the fertilising power of the liquid and solid manure, and through these the fertility of the soil.

In 1882 cereal prices fell very low, and all classes of Danish farmers recognised that cereal culture could no longer pay. The soil was run down, owing to the recurrence of grain crops, the inferior quality of the farmyard manure, and the entire absence of artificial fertilisers. Fortunately, butter, bacon, and beef prices were good, and the Danish farmers found a way out of the difficulty by changing their products. An obstacle in the way of this change lay in the fact that the butter produced by the farmers in general fetched only 10d. per lb., while that produced by the manorial dairies fetched 1s. 3d. per lb. If the farmers could only manage to make as good butter as the manorial dairies, and to market it like them, in an up-to-date style, the obstacle would be removed, and the economic salvation of Danish agriculture secured.

The advent of the separator in 1880 brought about the formation of many private dairy companies in Denmark. These companies bought the milk from the farmers, and made it into butter and cheese. The companies experienced a great deal of trouble and loss in disposing of the skim milk, buttermilk, and whey, which were fed to large numbers of pigs. The pig-fattening proved a failure owing to the one-sided character of the feed, and in many instances the companies were dissolved and the work abandoned.

HOW THE FIRST CO-OPERATIVE DAIRY WAS STARTED.

Some farmers in Olgöd parish, near Varde, Jutland, deliberated about starting small home dairies during the winter of 1881-2. They addressed themselves to a local well-to-do farmer's son, named Stilling Andersen, who was a graduate of Tüne Agricultural College, and had had some practical experience in one or two of the private dairies where separators were used. They offered to appoint him as their dairy adviser or expert. His duties would be to go round to each dairy farm and give instruction in souring cream, churning, butter-making, &c.; his residence would be centrally situated, and each farmer should deliver his butter there so that Andersen might classify it as first, second, or third quality, and pack it for the market, each quality to be paid for according to the current market prices.

THE MAN AND THE PROBLEM.

Andersen, in considering the proposition, foresaw the difficulties that were bound to arise in classifying the butter, and refused to undertake the work. He pointed out that each farmer would have to buy dairy equipment, and that the expense would be enormous. "Why not one first-class equipment for all," he asked, "in a

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central building, where all can deliver their milk to me daily in a fresh condition, so that I may be master of the situation?" He stipulated further that the farmers should take home the skim milk, &c., daily, and raise young stock and pigs with it, and that for a salary of £28 per annum and a free house he would undertake the work. After long deliberation the farmers accepted Andersen's proposal, with the reservation that except the milk of at least 400 cows was secured the project would be abandoned.

The owners of 300 cows expressed their willingness to become co-operators, while the owners* of about 150 cows refused to become co-operators, but were willing to bind themselves by contract to sell their cream to the dairy and take home the skim milk, &c.

Andersen was resolute, and immediately offered not alone to buy the cream of the non-co-operators, but to become a hundred-cow co-operator himself. This decisive action settled the matter, and the first co-operative dairy company was formed. In April, 1882, the work of building and equipping the dairy was begun, and on June 10th the same year Hjedding dairy was in full swing, with Stilling Andersen as manager. Practically speaking, this co-operative dairy initiated the great extension of the co-operative movement that has since revolutionised Denmark agriculturally, economically, and socially.

Farmers from neighbouring parishes came to see how things were done at Hjedding, and when they learned that the butter made by Stilling Andersen fetched as high a price on the English market as that made by the manorial dairies, they went home and set about establishing a co-operative dairy in their own parishes. In short, what the estated gentlemen were doing individually the small farmers set about doing co-operatively, and considerably before the close of the nineteenth century the co-operative dairy staffs had become specialists at their work, and the butter turned out was the best in Denmark, exceeding in quality and flavour the choicest products of the manorial dairies.

The farmers had very hard times during the first six or seven years, however, as they had to build dairies, increase the number of their cows, enlarge their barns and farm buildings, buy feeding stuffs such as oilcakes, bran, &c., in order to increase the output of the new products. Many attacks were made on the movement in the press. According to the pessimists, co-operative dairying was beset with dangers. Chiefest among them were:—

1. That the farmers had invested too much capital in the dairy business, and, considering their joint financial responsibility, they would soon find themselves on the high road.

* These owners prudently had a clause inserted in their contracts which permitted them to become co-operators and share all the advantages. All became co-operators within two years.

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2. That the farmers' diminished incomes would in a short time make them conscious of the evils of co-operation.
3. That the skim milk was unfit food either for man or beast, and that the rearing of young stock and pigs would become a partial failure in consequence.*
4. That home dairying was necessary in order to provide suitable occupation for the women.
5. That it was the duty of all to put an end to the co-operation evil as quickly as possible.

The individualism which pervades the foregoing pessimisms was directly opposed to the teaching of the Grundtvigian high schools. There rural Danish thinkers had learned that co-operation symbolised a "fraternal hand" stretched forth by the little people in the community to one another, and that the collective force of this mutual help gave the little people the same facilities of purchase, production, and sale as the big people, saved them a great deal of useless outlay, shielded them from the predatory inroads of private capital, prevented unsound commercial growths on the social body, directed trade into natural channels, and benefited the community in general instead of certain individuals or classes within it. The high schools had also taught them that co-operation embodied both spiritual and secular advantages, that it was not alone more business-like but also more Christian-like.

The following table indicates how quickly the farmers perceived that their collective interests were concentrated in the dairies:—

Co-operative Dairies built and equipped between 1882-85=	81	673 in
" " " " " " " " " " " "	1886-90=592	nine years.
" " " " " " " " " " " "	1891-1900=271	514 in
" " " " " " " " " " " "	1901-1913=243	23 years.
Total.....		1187 in 32 years.

Thus dairying may be said to have pioneered the co-operative movement and to have taught the farmers to apply co-operation to other uneconomic forms of rural enterprise. In short, the farmers saw that co-operation was only a means to an end, that it was neither more nor less than a practical remedy which could be applied to uneconomic purchase, production, and sale with excellent results.

Co-operative purchase enabled the small farmer to buy as economically as the large farmer, who purchased in wholesale quantities. Co-operative production conveyed to Danish agricultural products that uniformity and fixity of standard good quality which has enabled them to hold their own against all competitors in the

* Professor Fjord's practical experiments regarding the nutrient value of skim milk routed this assertion, while his pasteurising apparatus enabled the dairy manager to return bacteria-free skim milk. This gave a good deal of momentum to the dairy movement.

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world's markets. Co-operative sale has enabled the small producer to sell his products as profitably as the large producer. This statement may appear commonplace, but in practice it is of paramount importance.

Prior to the advent of co-operative dairying in 1882, the owners of 15·5 per cent. of the arable Danish land, or 1 per cent. of the farmers, bought their supplies economically and sold their produce profitably. To-day the owners of 84·5 per cent. of the arable land, or 99 per cent. of the farmers, buy as economically and sell as profitably as the 1 per cent.

WHAT DAIRYING HAS DONE FOR THE BACON INDUSTRY.

Most of the Danish pigs were exported alive to Hamburg during the seventies, the number slaughtered by Danish bacon curers being well in the minority. An outbreak of swine disease stopped the export of live hogs in the beginning of the eighties, and, as the growth of the dairy industry augmented the volume of dairy offal, the production of fat pigs steadily increased. The German embargo left the Danish pig market entirely at the mercy of the private Danish bacon curers, who lowered prices to such an extent that pig-fattening involved a loss to the producers. The small and middlestand farmers were hardest hit, and, inspired and encouraged by the success of the co-operative dairy movement, they took immediate action by starting a co-operative bacon factory in 1887. The new factory had a bullish effect upon the Danish pig market, which the producers warmly appreciated. In order to intensify the agreeable effect, the farmers speculated in nine new factories in the course of the following three years, thus increasing the number of factories to ten. In 1900 the number of co-operative bacon factories totalled twenty-six, and in 1912 they reached the respectable total of forty-three. About 135,000 co-operators have invested £550,000 in the forty-three factories. During 1913 there were 1,897,000 pigs* slaughtered in these factories, and the cash turnover amounted to 7¼ million pounds sterling.

WHAT DAIRYING HAS DONE FOR THE EGG INDUSTRY.

The influence that dairying has exercised on the egg industry is embodied in an argument recently put forward by one of the most efficient poultry keepers in Denmark, Mr. Franz Nielsen, B.Sc., who owns an egg-distributing centre, and tests the laying powers of his hens by means of trap-nests, selecting the eggs of the best layers for breeding purposes, making soup of the non-layers, and managing his two-legged stock much the same as Danish dairymen manage their four-legged stock. In

*Oxen, discarded dairy cows, &c., are also slaughtered in these factories, both for home consumption and export.

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reply to a criticism regarding the utility of poultry testing, Mr. Nielsen wrote as follows:—

Let us consider for a moment a circumstance that all have agreed in recognising as an established fact, viz., the progress and development of the Danish dairy industry during the last 20-30 years. Reliable statistics indicate an average increase in the annual milk yield of about 2,000lbs. per cow, or 30 per cent., without any appreciable increase in the amount of feed consumed. Successful breeders are fully agreed that this progress is due in a great measure to intelligent rearing, breeding, and feeding based on cow-testing records. The hereditary transmission of the quality of giving milk rich in butter fat has been definitely established by the cow-testing records during the last ten years, and has led to an increase of the butter yield from the same quantity of milk amounting to 20 per cent. These facts are based on practical experience, and therefore constitute a sound basis of argument.

People who raise poultry for the shows do not concern themselves with such practical experience; they concentrate on the handsome, well-made, typical hen, and refuse to discard it because it is a bad layer. As a rule, they are hostile towards trap-nest records.

Now with regard to dairy cows, in their case records are compulsory. No animals are awarded prizes at the shows except those that have been tested practically at regular intervals during the year and found to possess *good performance*, physique, and pedigree.

If poultry keepers wish to attain to anything like real, permanent progress, they must travel along the same road. To award prizes for handsome, well-made hens, without inquiring about their egg-laying powers, would only serve to mislead poultry keepers, to encourage inutility, and to play a game of haphazard with regard to profitableness.

Trap-nest control alone cannot bring about the desired progress; there are other weighty points to be considered in selecting breeding stock. March birds placed on the strength of the flock in the autumn should be controlled by means of trap-nests. The following spring the birds that have distinguished themselves as layers during the winter ought to be submitted to a careful examination some days before the selection for breeding is made. In the course of this examination each pullet should be inspected and points awarded for:

1. The virility and physique of the bird.
2. Its conformity with the standards of the breed.
3. Its plumage and colour.
4. Its pedigree based on trap-nest records.
5. The shape and peculiarity of the egg.
6. The colour and shell of the egg.
7. The weight of the egg.

These points, together with the trap-nest records, constitute the fundamentals to be considered in selecting breeding stock.

Mr. Nielsen's exposition of poultry testing and the selection of birds for breeding illustrates the influence that dairying has exercised upon the egg industry. During the last ten or twelve years trap-nest control has been widely practised, and flock books containing the records and pedigrees of good laying strains have been carefully written up. This practice has almost doubled the average laying powers of Danish hens in general. The poultry-raising cottiers are as much convinced of the efficiency of pedigree, heredity, and records with regard to egg production as Danish dairymen are of their efficiency with regard to milk and butter production.

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SUMMING UP.

Denmark has no mines, no potential water power, no great mills; it has existed, and it seems as if it must exist, solely by means of the brain and brawn of its people applied to an ungrateful soil. A population of $2\frac{3}{4}$ million* people is living in a country with an arable area of about $8\frac{1}{4}$ million acres of mostly poor, sandy land, in a condition of well-being, prosperity, and happiness, and exporting with ease and efficiency at least twenty million pounds worth of butter, bacon, eggs, &c., annually. How has this been brought about? By three factors: Education, co-operative dairying, and the intelligent assistance of the Government.†

As education is outside the scope of this article, the subject may be dismissed with a few words about high-school teaching. The Danish farmer owes most to the Grundtvigian high school: it cultivates his mind and supplies him with intellectual resources that make life worth living; it teaches that there is no debasement in being a peasant or a working man, nor any grandeur in being rich in goods and knowledge. Grundtvig taught that it is only when ignorance, immorality, and impiety accompany poverty that misfortune is found therein. And, again, he said: "Make every man a servant of God and a master of his task."

WHAT DAIRYING HAS DONE FOR DENMARK.

1. Co-operative dairying is the pervading cause of the success that has attended and continues to attend Danish agriculture.

2. Dairying has enormously increased the number of live stock, the area of land under tillage, and the value of the harvest since 1882.

Year.	Number of Horned Cattle.	Number of Pigs.	Millions of Poultry.	†Millions of Acres under Tillage.	Value of the Harvest in Millions of Pounds Sterling.
1881	1,470,000	527,420	5.1	3.4	15.72
1891	1,696,000	829,000	6.6	3.9	16.96
1901	1,840,000	1,168,000	10.6	4.17	26.66
1909	2,280,000	1,468,000	11.8	4.35	32.68

† Total arable area $8\frac{1}{4}$ million acres.

The increase in the number of horned cattle since 1881 is well over three-quarters of a million head; in 1861 7 per cent. of the 1,121,000 horned cattle were bullocks, in 1909 only $2\frac{1}{2}$ per cent. were bullocks. The number of pigs has been nearly trebled since 1881. The land is heavily stocked: a large number of stock means a large quantity of liquid and solid farmyard manure, higher soil

* Farmers and fishermen constitute 40 per cent. of the population.

† See table at end of article.

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fertility, and a negligible outlay for artificial fertilisers. The success of dairying encouraged the poultry keepers. A co-operative egg-exporting society was started in 1895, and the laying power of the poultry as well as their number have nearly doubled since then. The tillage area of 1909 is 850,000 acres larger than that of 1881; the root area of 1881 was only 84,000 acres, while that of 1912 was 903,000 acres. In 1909 the entire value of the harvest—*i.e.*, cereals, potatoes, roots, hay, straw, &c.—was greater by 16'96 million pounds sterling than that of 1881.

3. Prior to the advent of co-operative dairying in 1882, Denmark was a cereal-exporting land; since then it has become a cereal, bran, and oilcake importing land, as the following official statistics indicate:—

Year.	AVERAGE ANNUAL IMPORTS.		
	*Cereals in Millions of Cwts. (112lbs.)	Bran in Millions of Cwts. (112lbs.)	Oilcakes in Millions of Cwts. (112lbs.)
1881-1885.....	0.26	1.04	0.52
1886-1890.....	2.62	1.92	1.12
1891-1895.....	5.48	1.86	1.54
1896-1900.....	11.5	1.20	2.90
1901-1905.....	12.7	1.12	6.38
1905-1908.....	14.25	1.16	8.52

* Maize constitutes 50 per cent. of the cereals imported.

The exports of Danish cereals between 1866-71 averaged three-quarters of a million cwts. annually. In 1881 the cereal exports went down to zero. In 1885 the imports of cereals averaged a quarter million cwts. annually, as compared with 14½ million cwts. annually in 1905-8, an increase of 14 million cwts. in about twenty-five years. The annual imports of oilcakes between 1905 and 1908 averaged eight million cwts. more than those of 1881-5. The bran imports have fallen off in favour of cakes and cereals since 1890. Danish dairymen evidently regard cakes and cereals as the best feeds.

4. Dairy cattle, swine, poultry, &c., consume about three-fourths of the Danish harvest and large quantities of imported oilcakes, bran, maize, &c., besides. Therefore, co-operative dairying and its attendant consequences may be said to have transformed the natural products of the soil into manufactured products and the Danish farmers into manufacturers. Their raw materials are the natural products of the soil, together with the oilcakes, &c., imported; their machinery consists of cows, hogs, poultry, dairies, slaughtering yards, bacon factories; and their finished products are butter, bacon, eggs, and beef. Like most manufacturers, they labour incessantly to increase their cash turnover. (See the graphic table at the end of this article.)

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5. The following six products constitute 91 per cent. of the Danish agricultural exports, but do not include the imports from other lands or the home consumption of these products. Their value is given in millions of pounds sterling:—

Annual Average for	1891-5.	1896-1900.	1901-5.	*1906-8.	1911.
	£	£	£	£	£
Butter	3.77	5.21	7.24	9.07	10.83
Bacon	1.67	2.78	3.83	5.13	6.40
Eggs	0.37	0.70	1.17	1.41	1.44
Live Cattle and Beef	0.87	0.51	1.22	1.60	2.37
Horses	0.34	0.51	0.69	0.40	0.75
Skins and Hides	0.26	0.22	0.24	0.33	0.41
Total	7.28	9.93	14.39	17.94	22.20

* In 1906-8 butter constituted about 45 per cent. of the exports and bacon 25 per cent.

6. Dairying has reformed and vastly improved crop rotation, as the following schemes indicate:—

CROP ROTATION PRIOR TO THE ADVENT OF DAIRYING.

1st year.—Rye, lightly manured.
 2nd year.—Barley, lightly manured.
 3rd year.—Fallow.
 4th year.—Wheat, lightly manured.
 5th year.—Oats, lightly manured.

Potatoes.
 Wheat.
 Fallow.
 Rye, lightly manured.

CROP ROTATION SINCE DAIRYING BECAME GENERAL.

Roots, manured.
 Barley, slightly manured.
 Clover or Lucerne (Alfalfa).
 Rye.

Roots, manured.
 Barley, laid down with Grass and Clover.
 Grass and Clover.
 Grass.
 Oats.
 Lucerne (Alfalfa) or Peas.
 Rye.

7. Dairying has directly and indirectly augmented rural capital and improved the circulation of cash. The milk cheque, the ready cash for eggs, hogs, and superannuated dairy cows, &c., enable the farmers to obtain their supplies cheaper by paying cash. The cash circulation also benefits artisans, storekeepers, hired help, and the rural population in general. The wages paid to farm labourers have increased 100 per cent. since 1861.

8. The annual haulage of goods and animals on the Danish railways has increased from 1.2 million tons in 1880 to 6.8 million tons in 1909. Dairying has helped to bring about this increase.

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9. Danish butter, bacon, eggs, &c., are exported in steamers only, and this also applies to the maize, soya beans, oilcakes, &c., imported. Therefore, dairying has indirectly helped to increase the number of steamers from 192, with a carrying capacity of 44,000 tons, in 1879, to 652 steamers, with a carrying capacity of 406,000 tons, in 1909, or an increase of nine times the net tonnage of 1879.

THE INTELLIGENT ASSISTANCE OF THE GOVERNMENT.

Danish agriculture—with the sole exception of the sugar* beet industry—is not protected by a Customs tariff. Co-operation is encouraged but not directly subventioned by the State. The amount of public money spent *per capita* is as follows:—

For Agriculture	13·5d.
„ Army	93·0d.
„ Navy	40·0d.
„ Pensions	40·0d.
„ Schools	106·5d.
„ Public Improvements	53·0d.

The following table shows the annual amount of the agricultural subventions in 1887-8, 1899-1900, and 1910-11:—

	1887-88.	1899-1900.	1910-11.
	£	£	£
Domestic Animal Breeding; Cow Testing; Shows; Bull, Stallion, Boar, Ram, and Goat Premiums; Swine Breeding Centres, &c.....	21,249	51,641·1	83,036·5
Plant, Field, and Garden Culture, including six Experiment Stations for Plant Culture and several Branch Stations, Experts and Assistants' Salaries, &c.	7,010	10,310	31,231·8
Reclaiming Moors, Morasses, and Waste Land, &c.....	24,980	30,659	41,106·2
Travelling, Stipends and Prizes to Small Farmers, Salaries to Dairy and Agricultural Experts and their Assistants: Supervision of Danish Agricultural Exports; Salaries of Agricultural Consuls in London, Newcastle, and Hamburg	17,686	33,017·5	49,313·2
Subsidies to the Steamship Routes between Esbjerg, Denmark, and England.....	9,815	19,975·4	23,611·2
Winter Butter Shows and Butter Shows in general	1,112	2,022	2,222·2
New Houses and Land for Agricultural Labourers, Veterinary School, Short Courses for Farmers, Grants to Fishermen, &c.	6,666	3,215	2,016·6
Total	£88,518	£150,840	£232,537·7

* The duty on sugar is $\frac{3}{4}$ d. per lb.

THE DANISH CO-OPERATIVE SOCIETIES' ANNUAL TURNOVER, 1885-1912, in Millions of Pounds Sterling.

[illegible]

What Co-operative Dairying has done for Denmark.

The foregoing table indicates the collective cash turnover of the following forms of co-operative activity:—Dairies, bacon factories, egg-exporting companies, bacon-exporting companies, butter-exporting companies, retail rural supply stores, central rural supply depôts for the wholesale purchase of feeding stuffs, artificial manures, and agricultural implements and machinery, &c.; life, dairy property, farm property, animal, and accident insurance companies, &c.

ENGLAND'S IMPORTATION OF BUTTER IN CWTs. (112LBS.).

From	1909.	1910.	1911.	1912.
Denmark	1,764,027	1,726,091	1,707,178	1,618,048
Russia	601,712	584,040	638,284	683,650
France	413,306	361,249	171,080	246,652
New Zealand.....	278,581	362,674	276,446	349,012
Holland	148,567	154,537	104,655	113,716

The imports of Danish butter exceed the collective butter imports of Russia, France, New Zealand, and Holland. Any one of these nations is very much larger than the great little state of Denmark.



Co-operative Societies in the United Kingdom.

STATISTICS SHOWING THE POSITION AND PROGRESS OF THE
CO-OPERATIVE MOVEMENT FROM 1862 TO 1912.

THESE tables have been brought up to date on the basis of the Annual Returns by Societies to the Registrar of Friendly Societies, and corrected by the more recent returns to the Co-operative Union.

The tables refer to the United Kingdom, England and Wales, Scotland, and Ireland, and give the comparison between the figures of 1912 and those of ten years ago. We have also inserted below the figures relating to profits devoted to Education.

CO-OPERATION IN THE UNITED KINGDOM DURING 1902 AND 1912.

	1902.	1912.	INCREASE PER CENT.
Societies (making returns) ..No.	2,466	3,574	45
Members.....No.	2,103,264	3,167,682	50
Capital (share and loan)	£41,097,545	64,479,439	55
Sales	£89,772,923	130,499,145	45
Profits	£ 9,123,976	13,372,501	46
Profits devoted to Education...£	73,753	98,169	33

CO-OPERATION IN ENGLAND AND WALES DURING 1902 AND 1912.

	1902.	1912.	INCREASE PER CENT.
Societies (making returns) ..No.	1,824	2,561	40
Members.....No.	1,713,548	2,626,435	53
Capital (share and loan)	£32,588,515	51,287,578	57
Sales	£69,711,342	100,625,342	44
Profits	£ 6,877,301	10,077,968	46
Profits devoted to Education...£	62,817	82,338	31

CO-OPERATION IN SCOTLAND DURING 1902 AND 1912.

	1902.	1912.	INCREASE PER CENT.
Societies (making returns) ..No.	356	436	22
Members.....No.	345,112	449,316	30
Capital (share and loan)	£ 8,180,314	12,452,544	52
Sales	£18,709,093	26,184,089	39
Profits	£ 2,231,559	3,217,574	44
Profits devoted to Education...£	10,896	15,048	38

CO-OPERATION IN IRELAND DURING 1902 AND 1912.

	1902.	1912.
Societies (making returns) ..No.	286	577
Members.....No.	44,604	91,931
Capital (share and loan)	£ 328,716	739,317
Sales	£1,352,488	3,689,714
Profits	£ 15,116	76,959
Profits devoted to Education...£	40	783

CO-OPERATIVE SOCIETIES,

TABLE (1).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	NO. OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1862....	a454	768	332	90,341	428,376	54,499	2,333,523	165,562
1863....	51	73	381	111,163	579,902	76,738	2,673,778	216,005
1864....	146	110	394	6129,429	684,182	89,122	2,896,606	224,460
1865....	101	182	403	6124,659	819,367	107,263	3,373,847	279,226
1866....	163	240	441	6144,072	1,046,310	118,023	4,462,676	372,307
1867....	137	192	577	171,897	1,475,199	136,734	6,001,153	393,578
1868....	190	98	673	211,781	1,711,643	177,706	7,122,360	424,420
1869....	65	133	754	229,861	1,816,672	179,054	7,353,363	433,101
1870....	67	153	748	243,108	2,035,626	197,029	8,201,645	553,435
1871....	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872....	141	113	935	330,550	2,969,573	371,541	13,012,120	936,715
1873....	226	138	983	367,765	3,581,405	496,830	15,639,714	1,110,653
1874....	130	232	1,081	412,733	3,905,093	587,342	16,374,053	1,228,088
1875....	117	285	1,170	480,076	4,403,547	849,990	18,499,901	1,429,090
1876....	82	177	1,167	508,067	5,141,390	919,772	19,921,054	1,743,980
1877....	67	246	1,148	523,081	5,445,449	1,073,275	21,390,447	1,924,551
1878....	52	121	1,185	560,993	5,647,443	1,145,717	21,402,219	1,837,660
1879....	52	146	1,151	572,621	5,755,522	1,496,343	20,382,772	1,857,790
1880....	69	100	1,183	604,063	6,232,093	1,341,230	23,243,314	c1,863,599
1881....	66	..	1,240	643,617	6,940,173	1,483,583	24,945,063	1,981,109
1882....	67	115	1,288	687,158	7,591,241	1,622,431	27,541,212	2,155,399
1883....	55	170	1,291	729,957	7,921,356	1,577,086	29,336,028	2,434,996
1884....	78	63	1,400	797,950	8,646,188	1,830,836	30,424,101	2,723,794
1885....	84	50	1,441	850,659	9,211,259	1,945,384	31,305,910	2,988,690
1886....	83	65	1,486	894,488	9,747,452	2,160,090	32,730,745	3,070,111
1887....	87	145	1,516	967,828	10,344,216	2,253,576	34,433,771	3,190,309
1888....	100	140	1,592	1,011,258	10,946,219	2,452,887	37,793,903	3,454,974
1889....	93	123	1,621	1,071,089	11,687,912	2,923,711	40,674,673	3,734,546
1890....	122	159	1,647	1,140,573	12,783,629	3,163,155	43,781,669	4,275,617
1891....	117	122	1,684	1,207,511	13,847,705	3,393,394	49,024,171	4,718,532
1892....	127	24	1,791	1,284,843	14,647,707	3,773,616	51,060,854	4,743,352
1893....	106	59	1,825	1,340,318	15,318,665	3,874,954	51,893,836	4,610,657
1894....	113	61	1,930	1,373,004	15,756,064	4,064,681	52,110,800	4,928,838
1895....	123	113	1,966	1,430,340	16,749,826	4,581,573	55,100,249	5,389,071
1896....	128	134	2,010	1,534,824	18,236,040	4,786,331	59,951,635	5,990,023
1897....	126	165	2,065	1,627,135	19,510,007	h9,137,077	64,956,049	6,535,861
1898....	182	227	2,130	1,703,098	20,671,110	h9,914,226	68,523,969	6,939,276
1899....	152	298	2,183	1,787,570	22,340,533	h11,025,341	73,533,686	7,529,497
1900....	117	356	2,174	1,886,252	24,156,310	h12,010,771	81,020,423	8,177,522
1901....	153	332	2,239	1,980,441	25,697,099	h13,059,032	85,872,706	8,670,576
1902....	253	335	2,466	2,103,264	27,063,405	h14,034,140	99,772,923	9,123,976
1903....	225	381	2,523	2,215,373	28,200,869	h13,992,675	93,384,799	9,388,626
1904....	202	323	2,664	2,320,116	29,337,392	h14,255,546	96,263,323	9,791,740
1905....	175	249	2,745	2,402,354	30,389,065	h15,337,648	98,002,565	9,832,447
1906....	166	239	2,823	2,493,981	31,935,848	h16,332,735	102,403,120	10,293,784
1907....	165	287	2,846	2,615,321	33,888,721	h17,122,342	111,239,503	11,247,303
1908....	300	166	2,858	2,701,123	35,075,112	h17,649,071	113,090,337	10,996,769
1909....	206	119	2,985	2,794,943	36,077,053	h18,539,570	115,159,630	11,233,451
1910....	239	172	3,129	2,894,536	37,096,690	h19,573,444	118,443,910	11,250,718
1911....	259	274	3,167	3,003,260	39,019,208	h21,777,152	123,526,351	12,217,619
1912....	240	275	3,574	3,167,682	40,822,192	h23,657,247	130,499,145	13,372,504
					Totals....		2,441,414,425	234,617,537

a The Total Number Registered to the end of 1862. b Reduced by 18,278 for 1864, 23,927 for sale Society, and which were included in the returns from the Retail Societies. c Estimated Joint-stock Companies. e The return states this sum to be Investments other than in Trade Share Interest.

UNITED KINGDOM.

for each Year, from 1862 to 1912 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provident Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
127,749	.....	.....	.....	.....	.....	1862
167,620	.....	.....	.....	.....	.....	1863
163,147	.....	.....	.....	.....	.....	1864
181,766	.....	.....	.....	.....	.....	1865
219,746	.....	.....	.....	.....	.....	1866
255,923	558,559	d494,429	.....	8,208	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,867	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
479,130	1,383,063	318,477	382,846	6,696	98,601	1872
556,540	1,627,402	370,402	449,089	7,107	102,722	1873
594,455	1,781,053	418,301	522,081	7,949	116,829	1874
636,178	2,095,675	667,825	553,454	10,879	241,930	1875
1,279,856	2,664,042	.....	.....	.....	.....	1876
1,381,951	2,643,282	.....	.....	.....	.....	1877
1,494,607	2,609,729	.....	.....	.....	.....	1878
1,537,139	2,857,214	.....	.....	.....	.....	1879
1,429,160	2,880,076	e3,447,347	.....	13,910	.....	1880
.....	3,053,333	.....	.....	13,825	.....	1881
1,690,107	3,452,942	e4,281,264	.....	14,778	.....	1882
1,826,901	3,709,555	e4,497,718	.....	16,788	.....	1883
1,986,485	3,575,836	e4,550,890	.....	19,154	.....	1884
2,082,539	3,729,492	e5,433,120	.....	20,712	.....	1885
1,800,347	4,072,765	e3,858,940	.....	19,878	.....	1886
1,960,374	4,360,336	e4,491,483	.....	21,380	.....	1887
2,045,391	4,556,593	e5,233,859	.....	24,245	.....	1888
2,182,775	4,795,132	e5,833,278	.....	25,455	.....	1889
2,361,319	5,141,750	e6,958,787	.....	27,587	.....	1890
2,621,091	5,838,370	e6,394,867	.....	30,087	.....	1891
2,902,994	6,175,287	e6,952,906	.....	32,753	.....	1892
3,181,818	6,314,715	e7,089,689	.....	32,677	.....	1893
3,267,239	5,905,442	e7,174,736	.....	36,553	.....	1894
3,478,036	6,393,102	e7,880,602	.....	41,491	.....	1895
3,786,063	6,844,018	g13,929,329	.....	46,895	.....	1896
3,074,420	7,602,211	g14,278,094	.....	50,302	.....	1897
3,218,102	7,506,686	g15,753,086	.....	52,129	.....	1898
3,461,508	8,400,099	g17,203,236	.....	56,562	.....	1899
3,814,209	9,284,663	g18,788,895	.....	65,699	.....	1900
4,027,696	9,606,317	g20,466,113	.....	68,258	.....	1901
4,400,990	10,155,918	g21,305,360	.....	73,753	.....	1902
4,553,463	10,456,634	g22,127,521	.....	77,654	.....	1903
4,851,469	10,779,803	g22,968,250	.....	79,693	.....	1904
4,952,745	10,691,518	g24,991,839	.....	81,301	.....	1905
5,172,483	11,396,293	g26,725,655	.....	84,035	.....	1906
5,532,029	12,652,542	g28,561,160	.....	89,848	.....	1907
5,782,593	12,514,190	g29,713,548	.....	88,597	.....	1908
5,912,093	13,296,669	g30,977,960	.....	89,115	.....	1909
6,191,041	13,819,533	g32,687,018	.....	87,432	.....	1910
6,463,174	14,839,265	g36,182,911	.....	97,340	.....	1911
7,567,653	18,620,254	g35,464,444	.....	98,169	.....	1912

1865, and 30,921 for 1866, being the number of "Individual Members" returned by the Whole- on the basis of the returns made to the Central Co-operative Board for 1881. d Includes f Estimated. g Investments and other Assets. h Loans and other Creditors. j Exclusive of

CO-OPERATIVE SOCIETIES,

TABLE (2).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	No. of SOCIETIES				Number of Members.	CAPITAL at END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.	Share.		Loan.			
					£	£	£	£	
1862....	a454	f68	892	90,341	428,376	54,499	2,333,523	165,562	
1863....	51	73	381	111,163	579,902	76,738	2,673,778	216,005	
1864....	146	110	394	b129,429	684,182	89,122	2,836,606	224,460	
1865....	101	182	403	b124,659	819,367	107,263	3,373,847	279,226	
1866....	163	240	441	b144,072	1,046,310	118,023	4,462,676	372,307	
1867....	137	192	577	171,897	1,475,199	136,734	6,001,153	398,578	
1868....	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420	
1869....	65	133	754	229,861	1,816,672	179,054	7,353,363	438,101	
1870....	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435	
1871....	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399	
1872....	138	104	927	339,986	2,968,758	371,531	12,992,345	935,551	
1873....	225	135	978	387,301	3,579,962	496,740	15,623,553	1,109,795	
1874....	123	227	1,026	412,252	3,903,608	586,972	16,358,278	1,227,226	
1875....	116	283	1,163	479,284	4,793,909	844,620	18,484,382	1,427,365	
1876....	82	170	1,165	507,857	5,140,219	919,762	19,909,699	1,742,501	
1877....	66	240	1,144	528,576	5,437,959	1,073,265	21,374,013	1,922,361	
1878....	52	119	1,181	560,703	5,645,883	1,145,707	21,385,646	1,836,371	
1879....	51	146	1,145	573,084	5,747,907	1,496,143	20,365,602	1,856,308	
1880....	67	100	1,177	603,541	6,224,271	1,341,190	23,231,677	c1,866,889	
1881....	62	100	1,230	642,783	6,937,284	1,488,583	24,926,005	1,979,576	
1882....	66	113	1,276	685,981	7,581,739	1,622,253	27,509,055	2,153,699	
1883....	55	165	1,282	728,905	7,912,216	1,576,845	29,303,441	2,432,621	
1884....	76	57	1,391	896,845	8,636,960	1,830,624	30,392,112	2,722,103	
1885....	84	47	1,431	849,616	9,202,138	1,945,508	31,273,156	2,986,155	
1886....	82	62	1,474	893,153	9,738,278	2,159,746	32,684,244	3,067,436	
1887....	84	140	1,504	966,403	10,333,069	2,252,672	34,437,879	3,187,902	
1888....	100	130	1,579	1,009,773	10,935,031	2,452,158	37,742,429	3,451,577	
1889....	89	118	1,608	1,069,396	11,677,286	2,923,506	40,618,060	3,731,966	
1890....	110	151	1,631	1,138,780	12,776,733	3,168,788	43,667,363	4,273,010	
1891....	95	108	1,656	1,205,244	13,832,158	3,390,076	48,921,697	4,714,298	
1892....	113	14	1,753	1,282,103	14,627,570	3,766,737	50,902,681	4,739,771	
1893....	98	42	1,784	1,336,731	15,297,470	3,567,965	51,577,727	4,606,311	
1894....	101	43	1,880	1,368,944	15,732,061	4,054,172	51,846,349	4,923,027	
1895....	78	70	1,895	1,423,632	16,726,623	4,570,116	54,758,400	5,382,862	
1896....	92	87	1,908	1,525,233	18,197,828	4,766,244	59,461,852	5,933,655	
1897....	73	99	1,930	1,613,038	19,466,155	h9,081,368	64,362,943	6,529,136	
1898....	73	98	1,955	1,682,286	20,618,822	h9,837,103	67,869,094	6,931,704	
1899....	84	116	1,994	1,763,430	22,276,641	h10,928,770	72,743,708	7,516,114	
1900....	63	98	2,006	1,861,458	24,083,713	h11,905,132	80,124,319	8,163,390	
1901....	107	80	2,073	1,956,469	25,620,298	h12,947,182	84,941,764	8,653,300	
1902....	143	32	2,180	2,058,660	26,937,475	h13,831,354	88,420,435	9,108,860	
1903....	129	46	2,190	2,161,747	28,057,210	h13,754,070	91,921,507	9,321,688	
1904....	154	28	2,262	2,258,158	29,177,490	h13,978,857	94,733,258	9,772,073	
1905....	121	86	2,294	2,334,416	30,211,420	h15,049,262	96,112,124	9,795,620	
1906....	135	26	2,341	2,418,186	31,795,721	h16,037,956	100,191,190	10,249,218	
1907....	123	34	2,381	2,538,371	33,689,333	h16,832,636	108,873,205	11,209,568	
1908....	264	43	2,425	2,629,070	34,873,575	h17,372,059	110,665,842	10,949,283	
1909....	166	25	2,504	2,713,645	35,849,582	h18,237,045	112,592,272	11,188,296	
1910....	232	51	2,615	2,810,294	36,843,546	h19,224,957	115,710,497	11,198,724	
1911....	207	82	2,677	2,925,279	38,768,755	h21,465,441	120,775,906	12,145,934	
1912....	214	159	2,997	3,075,751	40,510,580	h23,229,542	126,809,431	13,295,542	
Totals..							2,410,417,902	234,027,729	

a The Total Number Registered to the end of 1862. b Reduced by 18,278 for 1864, 23,927 for 1865, and which were included in the returns from the Retail Societies. c Estimated on the Companies. d The return states this sum to be Investments other than in Trade. f Estimated.

GREAT BRITAIN.

for each Year, from 1862 to 1912 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provident Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
127,749	....	....	....	....	....	1862
167,620	....	....	....	....	....	1863
163,147	....	....	....	....	....	1864
181,766	....	....	....	....	....	1865
219,746	....	....	....	....	....	1866
255,923	583,539	d494,429	....	3,203	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,630	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
477,846	1,383,063	318,477	332,846	6,696	93,601	1872
555,766	1,627,402	370,402	449,039	7,107	102,722	1873
593,548	1,781,053	418,301	522,081	7,949	116,829	1874
685,118	2,094,325	667,825	553,454	10,379	241,930	1875
1,279,392	2,664,042	....	....	....	....	1876
1,381,285	2,647,309	....	....	....	....	1877
1,493,842	2,609,729	....	....	....	....	1878
1,536,282	2,857,214	....	....	....	....	1879
1,428,303	2,878,832	e3,429,935	17,407	13,910	....	1880
....	3,051,665	....	....	13,822	....	1881
1,689,223	3,450,481	e4,281,243	....	14,778	....	1882
1,818,880	3,706,978	e4,490,477	....	16,783	....	1883
1,933,297	3,672,226	e4,543,388	....	19,154	....	1884
2,080,427	3,726,756	e5,425,319	....	20,712	....	1885
1,797,696	4,068,831	e3,858,451	....	19,878	....	1886
1,957,373	4,354,857	e4,490,674	....	21,380	....	1887
2,041,566	4,550,743	e5,233,349	....	24,238	....	1888
2,178,961	4,789,170	e5,832,435	....	25,455	....	1889
2,357,647	5,136,580	e6,958,131	....	27,587	....	1890
2,617,200	5,332,573	e6,390,827	....	30,087	....	1891
2,397,117	6,168,947	e6,946,321	....	32,753	....	1892
3,174,460	6,309,624	e7,076,071	....	32,677	....	1893
3,256,156	5,898,804	e7,169,710	....	36,553	....	1894
3,465,905	6,323,781	e7,576,337	....	41,491	....	1895
3,767,651	6,828,943	g13,595,043	....	46,895	....	1896
3,061,934	7,582,623	g14,246,571	....	50,299	....	1897
3,201,894	7,490,945	g15,699,161	....	52,118	....	1898
3,443,627	8,380,722	g17,136,035	....	56,528	....	1899
3,791,397	9,264,705	g18,714,549	....	65,668	....	1900
3,002,960	9,577,474	g20,383,660	....	68,211	....	1901
3,358,590	10,110,723	g21,183,650	....	73,713	....	1902
3,515,553	10,409,588	g21,989,909	....	77,654	....	1903
3,808,149	10,729,084	g22,805,618	....	79,691	....	1904
3,404,571	10,639,740	g24,806,222	....	81,131	....	1905
3,126,895	11,338,431	g26,509,234	....	84,035	....	1906
3,475,756	12,592,253	g28,335,717	....	89,518	....	1907
3,727,599	12,550,884	g29,483,437	....	88,144	....	1908
3,856,596	13,235,692	g30,712,789	....	88,638	....	1909
3,129,063	13,744,319	g32,386,363	....	86,862	....	1910
3,397,177	14,760,893	g35,867,414	....	96,530	....	1911
3,448,029	13,512,571	g35,065,102	....	97,386	....	1912

1865, and 30,921 for 1866, being the number of "Individual Members" returned by the Wholesale basis of the returns made to the Central Co-operative Board for 1881. d Includes Joint-stock g Investments and other Assets. h Loans and other Creditors. j Exclusive of Share Interest.

CO-OPERATIVE SOCIETIES,

TABLE (3).—GENERAL SUMMARY of RETURNS

(Compiled from Official

No. OF SOCIETIES				CAPITAL AT END OF YEAR.		Sales.	Net Profit.	
YEAR.	Registered in the Year.	Not Making Returns.	Making Returns.	Number of Members.	Share.			Loan.
					£	£	£	£
1862....	454	68	332	90,941	428,376	54,499	2,333,523	165,562
1863....	51	73	381	111,163	579,902	76,788	2,673,778	216,005
1864....	146	110	394	129,429	6 ⁵⁴ .182	89,122	2,836,606	224,460
1865....	101	182	408	124,659	819,367	107,263	3,373,847	279,226
1866....	163	240	441	144,072	1,046,310	118,023	4,462,676	372,307
1867....	137	192	577	171,897	1,475,199	186,734	6,001,153	398,578
1868....	190	93	673	211,781	1,711,643	177,706	7,122,360	424,420
1869....	65	133	754	229,861	1,816,672	179,054	7,853,363	438,101
1870....	67	153	748	248,108	2,035,626	197,029	8,201,685	553,435
1871....	56	235	746	262,188	2,305,951	215,453	9,463,771	666,399
1872....	113	66	749	301,157	2,786,965	344,509	11,397,225	809,237
1873....	186	69	790	340,930	3,344,104	431,808	13,651,127	959,493
1874....	113	177	810	357,821	3,653,582	498,052	14,235,762	1,072,139
1875....	98	237	926	420,024	4,470,857	742,073	16,206,570	1,250,570
1876....	72	113	987	444,547	4,825,642	774,809	17,619,247	1,541,384
1877....	58	186	896	461,666	5,092,958	916,955	18,697,738	1,680,370
1878....	48	65	963	490,554	5,264,855	965,499	18,719,031	1,533,925
1879....	40	106	937	504,117	5,374,179	1,324,970	17,816,037	1,598,156
1880....	53	62	953	526,686	5,806,545	1,124,795	20,129,217	1,600,000
1881....	50	..	971	552,353	6,431,553	1,205,145	21,276,850	1,657,564
1882....	51	82	1,012	593,262	7,058,025	1,233,535	23,607,809	1,814,375
1883....	42	158	990	6 ² .871	7,281,448	1,203,764	24,776,980	2,036,826
1884....	64	48	1,079	672,780	7,379,686	1,359,007	25,600,250	2,237,210
1885....	73	47	1,114	717,019	8,364,367	1,408,941	25,858,065	2,419,615
1886....	67	61	1,141	751,117	8,793,068	1,551,989	26,747,174	2,476,651
1887....	73	139	1,170	813,537	9,269,422	1,593,420	28,221,988	2,542,884
1888....	94	125	1,244	850,020	9,793,852	1,743,890	30,350,048	2,766,131
1889....	81	112	1,268	897,841	10,424,169	2,098,100	33,016,341	2,981,543
1890....	103	149	1,290	955,393	11,380,210	2,136,364	35,367,102	3,393,991
1891....	88	108	1,313	1,008,448	12,253,427	2,260,686	39,617,376	3,781,254
1892....	106	12	1,404	1,073,739	12,848,024	2,487,499	40,827,931	3,701,402
1893....	92	40	1,432	1,119,210	13,400,337	2,453,723	41,483,346	3,592,856
1894....	96	41	1,525	1,139,535	13,668,938	2,520,779	41,731,223	3,841,723
1895....	68	69	1,530	1,191,766	14,511,314	2,803,917	44,003,888	4,194,876
1896....	88	84	1,554	1,264,763	15,620,803	2,952,740	47,331,334	4,569,732
1897....	68	98	1,573	1,336,985	16,654,107	3,659,493	50,693,526	4,989,589
1898....	71	96	1,606	1,392,819	17,659,826	3,690,007	53,256,725	5,333,221
1899....	75	108	1,645	1,467,153	18,999,477	3,860,518	57,134,086	5,742,523
1900....	54	91	1,656	1,547,772	20,514,300	3,854,385	62,923,437	6,208,116
1901....	99	23	1,719	1,629,319	21,858,778	3,911,772	66,567,091	6,533,543
1902....	134	23	1,824	1,713,548	22,981,436	3,967,079	69,711,342	6,877,301
1903....	120	42	1,840	1,800,325	23,792,554	3,925,997	72,296,789	6,934,344
1904....	146	28	1,907	1,880,712	24,607,773	3,920,147	73,713,727	7,278,535
1905....	111	33	1,937	1,944,427	25,349,340	3,874,248	74,555,412	7,323,093
1906....	126	26	1,979	2,017,980	26,627,183	4,073,544	78,015,639	7,652,244
1907....	112	33	2,016	2,127,774	28,340,261	4,157,250	85,050,249	8,422,277
1908....	249	42	2,053	2,209,497	29,297,740	4,183,069	86,869,663	8,208,370
1909....	143	25	2,112	2,291,233	30,201,418	4,276,109	89,114,373	8,558,499
1910....	204	49	2,201	2,330,498	30,995,333	4,377,422	91,363,861	8,516,176
1911....	186	71	2,260	2,432,062	32,690,917	4,538,669	96,070,729	9,252,802
1912....	191	144	2,561	2,626,435	34,199,488	4,708,090	100,625,342	10,077,968
Totals..							1,940,424,562	181,801,051

a Loans and other Creditors.

ENGLAND AND WALES.

for each Year, from 1862 to 1912 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provident Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
127,749	.....	.....	.....	.....	.....	1862
167,620	.....	.....	.....	.....	.....	1863
163,147	.....	.....	.....	.....	.....	1864
181,766	.....	.....	.....	.....	.....	1865
219,746	.....	.....	.....	.....	.....	1866
255,928	583,539	494,429	.....	3,208	32,629	1867
294,451	671,165	137,397	166,398	3,636	33,109	1868
280,116	784,847	117,586	178,367	3,814	38,690	1869
311,910	912,102	126,736	204,876	4,275	52,990	1870
346,415	1,029,446	145,004	262,594	5,097	66,631	1871
419,567	1,219,092	300,712	380,043	6,461	79,292	1872
488,464	1,439,137	337,811	443,724	6,864	88,149	1873
517,445	1,572,264	386,640	510,057	7,486	98,732	1874
598,080	1,852,437	636,400	538,140	10,454	220,011	1875
1,137,053	2,377,380	.....	.....	.....	.....	1876
1,222,664	2,310,041	.....	.....	.....	.....	1877
1,315,364	2,286,795	.....	.....	.....	.....	1878
1,353,332	2,486,704	.....	.....	.....	.....	1879
1,285,375	2,512,039	†3,226,370	.....	13,262	.....	1880
.....	2,585,443	.....	.....	13,314	.....	1881
1,499,633	2,969,957	†3,919,455	.....	14,070	.....	1882
1,606,424	3,160,569	†4,113,995	.....	15,903	.....	1883
1,684,070	2,932,517	†4,118,751	.....	18,062	.....	1884
1,825,717	3,044,534	†4,811,819	.....	19,374	.....	1885
1,625,194	3,323,450	†3,475,319	.....	18,440	.....	1886
1,670,290	3,512,626	†4,112,807	.....	19,707	.....	1887
1,743,838	3,687,394	†4,868,141	.....	22,391	.....	1888
1,849,811	3,856,498	†5,386,444	.....	23,389	.....	1889
1,996,438	4,121,400	†6,407,701	.....	24,919	.....	1890
2,207,143	4,691,301	†5,749,311	.....	27,196	.....	1891
2,420,270	4,947,231	†6,154,426	.....	29,105	.....	1892
2,645,989	5,032,623	†6,234,093	.....	29,151	.....	1893
2,687,388	4,763,953	†6,054,847	.....	32,503	.....	1894
2,881,742	5,108,794	†6,625,724	.....	36,433	.....	1895
3,097,516	5,535,227	†11,303,924	.....	40,269	.....	1896
b2,469,953	6,068,803	†11,670,057	.....	42,791	.....	1897
b2,549,753	6,017,205	†12,816,168	.....	44,495	.....	1898
b2,733,022	6,714,611	†13,998,278	.....	48,214	.....	1899
b2,992,995	7,393,373	†15,151,574	.....	53,684	.....	1900
b3,174,796	7,660,701	†16,217,514	.....	57,908	.....	1901
b3,464,182	8,031,117	†16,638,477	.....	62,817	.....	1902
b3,556,921	8,199,925	†17,271,042	.....	64,823	.....	1903
b3,772,825	8,389,857	†17,667,614	.....	66,356	.....	1904
b3,801,069	8,407,953	†18,870,085	.....	67,849	.....	1905
b3,972,756	9,040,833	†20,247,597	.....	70,410	.....	1906
b4,261,368	10,056,367	†21,967,523	.....	75,254	.....	1907
b4,467,700	10,046,542	†22,523,890	.....	74,818	.....	1908
b4,602,313	10,590,863	†23,954,878	.....	74,898	.....	1909
b4,808,397	11,186,506	†25,331,223	.....	72,973	.....	1910
b5,073,113	12,181,124	†26,247,743	.....	81,606	.....	1911
b5,936,455	10,937,309	†27,355,573	.....	82,338	.....	1912

‡ Exclusive of Share Interest.

† Investments other than in Trade.

‡ Investments and other Assets.

CO-OPERATIVE

TABLE (4).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	NO. OF SOCIETIES			Number of Members.	CAPITAL AT END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.		Share.	Loan.		
					£	£	£	£
1872....	25	88	178	38,829	181,798	27,022	1,595,120	126,814
1873....	39	66	188	46,871	235,858	64,932	1,972,426	150,802
1874....	15	50	216	54,481	250,026	88,920	2,062,516	155,087
1875....	18	46	287	59,260	323,052	102,547	2,277,812	176,795
1876....	10	57	228	63,310	314,577	144,953	2,290,452	201,117
1877....	8	54	248	66,910	345,001	156,310	2,676,225	241,991
1878....	4	54	218	70,119	381,028	180,208	2,666,565	252,446
1879..	11	*40	208	68,967	373,728	171,173	2,549,565	258,152
1880....	14	88	224	76,855	417,720	216,395	3,102,460	266,839
1881....	12	9	259	90,480	505,731	278,438	3,649,155	322,012
1882....	15	81	264	92,719	523,714	328,658	3,901,246	339,324
1883....	13	7	292	106,034	630,768	373,081	4,526,461	395,795
1884....	12	9	312	124,065	757,274	471,617	4,791,862	484,893
1885....	11	..	317	132,597	837,771	536,567	5,415,091	566,540
1886....	15	1	338	142,036	945,210	607,757	5,937,070	590,785
1887....	11	1	334	152,866	1,063,647	654,252	6,215,891	645,018
1888....	5	5	335	159,753	1,141,179	708,268	7,392,381	685,446
1889....	8	6	340	171,555	1,253,117	825,406	7,601,719	750,428
1890....	7	2	341	183,387	1,396,523	972,424	8,300,261	879,019
1891....	7	..	343	196,796	1,578,781	1,129,390	9,304,321	933,044
1892....	12	2	349	208,364	1,779,546	1,279,238	10,074,750	1,038,369
1893....	6	2	352	217,521	1,896,638	1,413,582	10,094,381	1,013,955
1894....	5	2	355	229,409	2,063,123	1,533,393	10,115,126	1,081,304
1895....	10	1	365	231,866	2,215,309	1,766,109	10,754,512	1,187,986
1896....	4	3	354	260,520	2,577,025	1,813,504	12,130,468	1,413,873
1897....	5	1	357	276,063	2,812,048	2,511,875	13,669,417	1,589,547
1898....	2	2	349	282,467	2,958,996	2,847,096	14,612,369	1,598,483
1899....	9	8	349	296,272	3,277,164	3,068,252	15,609,622	1,773,591
1900....	9	7	350	313,686	3,574,413	3,400,747	17,200,882	1,955,274
1901....	8	7	354	327,150	3,761,520	3,832,410	17,984,673	2,119,757
1902....	9	4	356	345,112	3,956,039	4,224,275	18,709,093	2,231,559
1903....	9	4	350	361,422	4,264,656	4,496,073	19,624,718	2,337,344
1904....	8	..	355	377,446	4,569,707	4,776,910	21,019,531	2,493,538
1905....	10	3	357	389,989	4,861,500	5,175,014	21,556,712	2,472,527
1906....	9	..	362	400,206	5,168,538	5,298,410	22,175,551	2,596,974
1907....	11	1	365	410,597	5,349,122	5,375,386	23,822,956	2,787,291
1908....	15	1	372	419,573	5,575,835	5,488,990	23,796,179	2,740,913
1909....	23	..	392	422,362	5,648,164	5,590,936	23,477,899	2,629,797
1910....	28	2	414	429,796	5,848,213	5,547,535	24,346,636	2,682,543
1911....	21	11	417	433,217	6,077,838	5,926,772	24,705,177	2,893,132
1912....	23	15	436	449,316	6,311,092	6,141,452	26,184,089	3,217,574
						Totals..	469,893,340	52,226,678

* Not stated, but estimated at about 40. a Loans and other Creditors.

SOCIETIES, SCOTLAND.

for each Year, from 1872 to 1912 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provident Societies, and other than Trade.	Joint-stock Companies.			
£	£	£	£	£	£	
58,279	163,971	17,765	2,803	235	14,309	... 1872
67,902	188,265	32,591	5,315	243	19,573	... 1873
76,103	208,799	31,661	12,024	463	18,097	... 1874
87,098	241,888	31,425	15,314	425	21,919	... 1875
142,839	286,662	....	....	....	....	... 1876
158,621	337,268	....	....	....	....	... 1877
178,478	322,934	....	....	....	....	... 1878
182,450	370,510	....	....	....	....	... 1879
142,428	366,793	203,565	17,407	648	....	... 1880
....	466,222	....	....	508	....	... 1881
190,190	480,524	†361,788	....	708	....	... 1882
212,456	546,409	†376,492	....	885	....	... 1883
249,227	639,409	†424,637	....	1,092	....	... 1884
254,710	682,222	†613,500	....	1,338	....	... 1885
272,502	745,381	†883,132	....	1,438	....	... 1886
287,583	842,231	†377,867	....	1,673	....	... 1887
297,728	863,349	†365,208	....	1,847	....	... 1888
329,150	932,672	†445,991	....	2,067	....	... 1889
361,209	1,015,190	†550,480	....	2,668	....	... 1890
410,057	1,140,772	†641,016	....	2,891	....	... 1891
476,847	1,221,716	†791,895	....	3,648	....	... 1892
528,471	1,277,001	†841,978	....	3,526	....	... 1893
568,768	1,134,851	†1,114,868	....	4,050	....	... 1894
584,163	1,214,987	†1,251,063	....	5,058	....	... 1895
670,135	1,293,716	†2,591,119	....	6,626	....	... 1896
659,191	1,513,820	†2,576,514	....	7,508	....	... 1897
6652,141	1,473,740	†2,882,993	....	7,623	....	... 1898
6710,605	1,666,111	†3,137,757	....	8,314	....	... 1899
6798,402	1,871,327	†3,562,975	....	11,994	....	... 1900
6828,164	1,916,773	†4,166,146	....	10,303	....	... 1901
6894,408	2,079,606	†4,495,173	....	10,896	....	... 1902
6958,632	2,209,663	†4,718,867	....	12,331	....	... 1903
61,035,324	2,339,227	†5,138,004	....	13,335	....	... 1904
61,109,502	2,231,787	†5,936,137	....	13,282	....	... 1905
61,154,139	2,297,598	†6,261,337	....	13,625	....	... 1906
61,214,388	2,535,886	†6,368,195	....	14,264	....	... 1907
61,259,899	2,504,342	†6,659,547	....	13,326	....	... 1908
61,253,783	2,644,829	†6,757,911	....	13,740	....	... 1909
61,320,666	2,557,818	†7,055,140	....	13,889	....	... 1910
61,324,065	2,579,769	†7,619,671	....	14,924	....	... 1911
61,511,574	2,575,262	†7,809,529	....	15,048	....	... 1912

6 Exclusive of Share Interest.

† Investments other than in Trade.

‡ Investments and other Assets.

CO-OPERATIVE

TABLE (5).—GENERAL SUMMARY of RETURNS

(Compiled from Official

YEAR.	NO. OF SOCIETIES				CAPITAL AT END OF YEAR.		Sales.	Net Profit.
	Registered in the Year.	Not Making Returns.	Making Returns.	Number of Members.	Share.	Loan.		
					£	£	£	£
1874....	2	5	5	481	1,485	370	15,775	812
1875....	1	2	7	792	9,638	5,370	15,519	1,725
1876....	..	7	2	210	1,171	10	11,355	1,479
1877....	1	6	4	505	7,490	10	16,434	2,190
1878....	..	2	4	290	1,560	10	16,573	1,289
1879....	1	..	6	537	7,615	200	17,170	1,482
1880....	2	..	6	522	7,822	100	16,637	1,760
1881....	4	..	10	834	2,889	....	19,058	1,533
1882....	1	2	12	1,177	9,502	178	32,157	1,699
1883....	..	5	9	1,052	9,140	241	32,587	2,375
1884....	2	6	9	1,105	9,228	212	31,989	1,691
1885....	..	3	10	1,043	9,121	326	32,754	2,535
1886....		8	12	1,335	9,174	344	46,501	2,675
1887....	3	5	12	1,425	11,147	904	45,892	2,407
1888....	1	10	13	1,485	11,188	729	51,474	3,397
1889....	4	5	13	1,693	10,826	205	56,613	2,580
1890....	12	8	16	1,793	6,896	867	64,306	2,607
1891....	22	14	23	2,267	15,547	3,318	102,474	4,234
1892....	9	10	83	2,740	20,137	6,879	153,173	3,581
1893....	8	17	41	3,587	21,195	7,649	226,109	3,846
1894....	12	18	50	4,060	24,003	10,509	264,451	5,811
1895....	45	43	71	6,708	23,203	11,457	341,849	6,209
1896....	36	47	102	9,541	33,212	20,087	489,783	6,368
1897....	53	66	135	14,097	43,852	a55,709	593,106	6,725
1898....	109	199	175	20,812	52,283	a77,123	654,375	7,572
1899....	68	182	189	24,146	63,892	a96,571	783,973	13,363
1900....	54	253	163	24,794	67,597	a105,639	896,109	14,432
1901....	46	302	166	23,972	76,801	a111,850	930,942	17,276
1902....	110	303	286	44,604	125,930	a202,786	1,352,488	15,116
1903....	96	335	333	54,126	143,659	a238,605	1,463,292	16,938
1904....	48	295	402	61,958	159,912	a276,689	1,530,070	19,667
1905....	54	213	451	67,933	177,645	a288,336	1,890,441	26,827
1906....	31	218	482	75,795	190,127	a294,779	2,216,980	44,566
1907....	42	253	465	76,950	199,333	a289,706	2,366,298	37,735
1908....	36	118	433	72,053	201,537	a277,012	2,424,495	47,496
1909....	40	94	481	81,298	227,471	a302,525	2,567,358	45,155
1910....	57	121	514	84,232	253,084	a348,487	2,738,413	51,994
1911....	52	192	490	77,981	250,453	a311,711	2,750,445	71,635
1912....	26	116	577	91,931	311,612	a427,705	3,689,714	76,959
Totals..							30,960,597	537,781

a Loans and other Creditors.

SOCIETIES, IRELAND.

for each Year, from 1874 to 1912 inclusive.

Sources, and Corrected.)

Trade Expenses.	Trade Stock.	CAPITAL INVESTED IN		Profit Devoted to Education.	Amount of Reserve Fund.	YEAR.
		Industrial and Provident Societies.	Joint-stock Companies.			
£	£	£	£	£	£	
907	....	....	....	....	....	....1874
1,060	1,350	....	....	....	67	1875
464	....	....	....	....	....	....1876
676	973	....	....	....	....	....1877
765	....	....	....	....	15	1878
856	....	....	....	45	71	1879
857	1,244	5	....	....	....	....1880
1,039	1,668	8	....	8	....	....1881
2,284	2,461	*21	....	....	....	....1882
1,924	2,577	*7,241	....	....	....	....1883
3,188	3,610	*7,502	....	....	....	....1884
2,112	2,736	*7,801	....	....	....	....1885
2,651	3,934	....	....	....	....	....1886
2,501	5,979	*809	....	....	....	....1887
3,325	5,850	*510	....	7	....	....1888
3,814	5,962	*943	....	....	....	....1889
3,672	5,170	*656	....	....	....	....1890
3,891	5,797	*4,040	....	....	....	....1891
5,877	6,340	*6,585	....	....	....	....1892
7,358	5,091	*13,618	....	....	....	....1893
11,182	6,638	*5,026	....	....	....	....1894
12,181	9,321	*3,765	....	....	....	....1895
18,412	15,075	+34,286	....	....	....	....1896
212,486	19,588	+31,523	....	3	....	....1897
116,508	15,741	+53,925	....	11	....	....1898
217,881	19,977	+67,201	....	34	....	....1899
222,812	19,958	+74,346	....	81	....	....1900
224,736	23,843	+82,453	....	47	....	....1901
242,400	45,195	+121,710	....	40	....	....1902
237,910	47,046	+137,612	....	....	....	....1903
243,320	50,719	+162,632	....	2	....	....1904
248,174	51,778	+185,617	....	170	....	....1905
245,588	57,862	+216,421	....	....	....	....1906
256,273	60,289	+225,442	....	390	....	....1907
254,994	63,246	+230,111	....	393	....	....1908
255,497	60,977	+265,171	....	477	....	....1909
261,978	75,214	+300,655	....	570	....	....1910
265,997	78,372	+315,497	....	810	....	....1911
2119,624	107,683	+399,342	....	783	....	....1912

‡ Exclusive of Share Interest.

* Investments other than in Trade.

† Investments and other Assets.

LIST OF PUBLIC ACTS OF PARLIAMENT.

4 AND 5 GEORGE V.—A.D. 1914.

The figures before each Act denote the Chapter.

1. Consolidated Fund (No. 1).
2. Army (Annual).
3. Grey Seals (Protection).
4. Sheffield University.
5. Superannuation (Ecclesiastical Commissioners and Queen Anne's Bounty).
6. Affiliation Orders.
7. Agricultural Holdings.
8. Police (Weekly Rest Day) (Scotland).
9. Government of the Sudan (Loan).
10. Finance.
11. Postponement of Payments.
12. Aliens Restrictions.
13. Prize Courts (Procedure).
14. Currency and Bank Notes.
15. Exportation of Horses.
16. Trade Marks.
17. British Nationality and Status of Aliens.
18. Patents and Designs.
19. Isle of Man (Customs).
20. Education (Provision of Meals).
21. County and Borough Councils (Qualification).
22. Coal Mines.
23. Expiring Laws Continuance.
24. Appropriation.
25. Electoral Disabilities (Naval and Military Service Removal).
26. Army (Supply of Food Forage and Stores).
27. Patents, Designs, and Trade Marks (Temporary Rules).
28. Mall Approach (Improvement).
29. Defence of the Realm.
30. Injuries in War (Compensation).
31. Housing.
32. Labourers (Ireland).
33. Public Works Loans.
34. Police Reservists (Allowances).
35. Education (Provision of Meals) (Ireland).
36. Osborne Estate.
37. Anglo-Persian Oil Company (Acquisition of Capital).
38. East Africa Protectorates (Loans).
39. County, Town, and Parish Councils (Qualification) (Scotland).
40. Diseases of Animals (Ireland).
41. Intermediate Education (Ireland).
42. Merchant Shipping (Certificates).
43. Entail (Scotland).

List of Public Acts of Parliament.

44. Metropolitan Police (Employment in Scotland).
45. Elementary Education (Defective and Epileptic Children).
46. Milk and Dairies (Scotland).
47. Deeds of Arrangement.
48. Feudal Casualties (Scotland).
49. Milk and Dairies.
50. Merchant Shipping (Convention).
51. Unreasonable Withholding of Food Supplies.
52. Housing (No. 2).
53. Special Constables (Scotland).
54. Constabulary and Police (Ireland).
55. River Navigation and Improvement (Ireland).
56. Charitable Trusts.
57. National Insurance (Part II. Amendment).
58. Criminal Justice Administration.
59. Bankruptcy.
60. War Loan.
61. Special Constables.
62. Isle of Man (War Legislation).
63. Defence of the Realm (No. 2).
64. Customs (Exportation Prohibition).
65. Articles of Commerce (Returns, &c.).
66. Elementary School Teachers (War Service) Superannuation.
67. Education (Scotland) (War Service) Superannuation.
68. Education (Scotland) (Provision of Meals).
69. Police (Scotland) (Limits of Age).
70. Naval Billeting, &c.
71. Housing (No. 2) (Extension to Ireland).
72. Currency and Bank Notes (Amendment).
73. Patents, Designs, and Trade Marks (Temporary Rules) Amendment.
74. Local Government (Adjustments) (Scotland).
75. Slaughter of Animals.
76. Death Duties (Killed in War).
77. Intoxicating Liquors (Temporary Restrictions).
78. Courts (Emergency Powers).
79. Prize Courts (Egypt, Zanzibar, and Cyprus).
80. Police Constables (Naval and Military Service).
81. National Insurance (Navy and Army).
82. Bills of Exchange.
83. Army Pensions.
84. Irish Police Constables (Naval and Military Service).
85. Rates (Proceedings for Recovery).
86. Superannuation.
87. Trading with the Enemy.
88. Suspensory.
89. Navy (Pledging of Certificates, &c.).
90. Government of Ireland.
91. Welsh Church.

NATIONAL INCOME AND EXPENDITURE.

An Account of the Public Income and Expenditure of the United Kingdom of Great Britain and Ireland in the Year ended March 31, 1914, presented to Parliament pursuant to Act 17 and 18 Vict., c. 94, s. 2.

INCOME.			EXPENDITURE.		
£	s.	d.	£	s.	d.
CONSOLIDATED FUND SERVICES.					
NATIONAL DEBT SERVICES—					
Inside the Permanent or Fixed Annual Charge.					
Funded Debt—					
Interest.....			14,737,108	16	2
Terminable Annuities.....			3,202,026	13	5
Interest on Unfunded Debt.....			1,116,849	18	7
Management of the Debt.....			166,529	19	9
New Sinking Fund.....			5,228,484	13	1
Road Improvement Fund.....			24,500,000	0	0
Payments to Local Taxation Accounts, &c.....			1,394,951	0	0
			9,734,127	10	6
OTHER CONSOLIDATED FUND SERVICES—			470,000	0	0
Civil List.....			316,575	18	6
Annuities and Pensions.....			56,547	2	1
Salaries and Allowances.....			698,043	7	3
Courts of Justice.....			817,725	4	0
Miscellaneous Services.....			1,638,890	6	10
SUPPLY SERVICES.					
Army.....			28,391,000	0	0
Ordnance Factories.....			15,900	0	0
Navy.....			48,888,000	0	0
Miscellaneous Civil Services.....			53,901,000	0	0
Customs and Inland Revenue Departments.....			4,483,000	0	0
Post Office.....			24,607,000	0	0
			160,170,000	0	0
Total Expenditure.....			197,492,968	17	4
Excess of Income over Expenditure.....			749,928	6	8
Total Income.....			£198,242,897	4	0

CUSTOMS TARIFF OF THE UNITED KINGDOM.

ARTICLES subject to IMPORT DUTIES in the UNITED KINGDOM, and the DUTY levied upon each ARTICLE, according to the Tariff in operation on the 1st July, 1914.

ARTICLES.		RATES OF DUTY.	
IMPORTS.			
BEER called Mum, Spruce, or Black Beer, and Berlin White Beer and other preparations, whether fermented or not fermented, of a character similar to Mum, Spruce, or Black Beer, where the worts thereof were, before fermentation, of a specific gravity—			£ s. d.
Not exceeding 1,215°	{ per every 36 galls. }	1 13 0	
Exceeding 1,215°	"	1 18 8	
BEER of any other description, where the worts thereof were, before fermentation, of a specific gravity of 1,055°..		"	0 8 3
And so on in proportion for any difference in gravity.			
CARDS, PLAYING	doz. packs.	3 9	
CHICORY:			
Raw or kiln-dried.....	per cwt.	0 13 3	
Roasted or ground	per lb.	0 0 2	
CHLORAL HYDRATE.....	"	0 1 9	
CHLOROFORM	"	0 4 4	
COCOA:			
Raw.....	"	0 0 1	
Husks and Shells	per cwt.	0 2 0	
Cocoa or Chocolate, ground, prepared, or in any way manufactured	" { Charged under Sec. 7, Finance Act, 1901.		
Cocoa Butter.....	per lb.	0 0 1	
COFFEE:			
Raw.....	per cwt.	0 14 0	
Kiln-dried, roasted, or ground	per lb.	0 0 2	
Coffee and Chicory (or other vegetable substances) roasted and ground, mixed.....	"	0 0 2	
COLLODION	per gallon.	1 14 11	
ETHER, Acetic	per lb.	0 2 7	
" Butyric	per gallon.	1 1 10	
" Sulphuric	"	1 16 6	
ETHYL, Bromide.....	per lb.	0 1 5	
" Chloride.....	per gallon.	1 1 10	
" Iodide	"	0 19 0	

Customs Tariff of the United Kingdom.

ARTICLES.		RATES OF DUTY.			
FRUIT —Dried, or otherwise preserved without Sugar :—				£	s. d.
Currants	per cwt.			0	2 0
Figs and Fig Cake, Plums, commonly called French Plums, and Prunelloes, Plums dried or preserved, not otherwise described, Prunes and Raisins	”			0	7 0
Fruit, liable to duty as such, preserved with Sugar—					
GLUCOSE :—					
Solid	”			0	1 2
Liquid	”			0	0 10
MOLASSES and invert Sugar and all other Sugar and extracts from Sugar which cannot be completely tested by the polariscope and on which duty is not otherwise charged :					
If containing 70 per cent. or more of sweetening matter	”			0	1 2
If containing less than 70 per cent., and more than 50 per cent. of sweetening matter	”			0	0 10
If containing not more than 50 per cent. of sweetening matter	”			0	0 5
Molasses is free of duty when cleared for use by a licensed distiller in the manufacture of Spirits, or if it is to be used solely for purposes of food for stock.					
SACCHARIN and mixtures containing Saccharin, or other substances of like nature or use	per oz.			0	0 7
SOAP, TRANSPARENT , in the manufacture of which Spirit has been used	per lb.			0	0 3
SPIRITS AND STRONG WATERS :					
For every gallon, computed at hydrometer proof, of Spirits of any description (except perfumed Spirits), including Naphtha or Methylic Alcohol purified so as to be potable, and mixtures and preparations containing Spirits.					
Enumerated Spirits :—					
Brandy	the proof gallon	0	15 1	0	16 1
Rum	”	0	15 1	0	16 1
Imitation Rum	”	0	15 2	0	16 2
Geneva	”	0	15 2	0	16 2
Additional in respect of Sugar used in sweetening any of the above tested for strength, if sweetened to such an extent that the Spirit thereby ceases to be an Enumerated Spirit ;					
the proof gallon		0	0 1	0	0 1
Unenumerated Spirits :—					
Sweetened	the proof gallon	0	15 3	0	16 3
(Including Liqueurs, Cordials, Mixtures, and other preparations containing Spirits ; if tested.)					
Not Sweetened	the proof gallon	0	15 2	0	15 2
(Including Liqueurs, Cordials, Mixtures, and other preparations containing Spirits, provided such Spirits can be shown to be both Unenumerated and not sweetened ; if tested.)					
Liqueurs, Cordials, Mixtures, and other preparations containing Spirits, not sweetened, provided such spirits are not shown to be Unenumerated ; if tested.					
the proof gallon		0	15 2	0	16 2

Customs Tariff of the United Kingdom.

ARTICLES.	RATES OF DUTY.					
	Imported in Casks.			Imported in Bottles.		
	£	s.	d.	£	s.	d.
SPIRITS AND STRONG WATERS—continued.						
Liqueurs, Cordials, Mixtures, and other preparations containing Spirits in bottle, entered in such a manner as to indicate that the strength is not to be tested; the liquid gallon	..			1	1	5
Perfumed Spirits the liquid gallon	1	4	1	1	5	1
Upon payment of the difference between the Customs Duty on Foreign Spirits and the Excise Duty on British Spirits, Foreign Spirits may be delivered under certain conditions for Methylation or for use in Art or Manufacture, but Foreign Methylic Alcohol may be used in Art or Manufacture without payment of this differential duty.						
*Motor Spirit	per gallon.			0	0	3
SUGAR:						
Tested by the polariscope, of a polarisation exceeding 98°	per cwt.			0	1	10
Of a polarisation not exceeding 76°	"			0	0	10
Intermediate rates of duty are levied on Sugar of a polarisation not exceeding 98°, but exceeding 76°, and special rates on Composite Sugar Articles.						
TEA	per lb.			0	0	5
TOBACCO—Manufactured, viz.:						
Cigars	"			0	7	0
Cavendish or Negro-head	"			0	5	4
Cavendish or Negro-head Manufactured in Bond	"			0	4	8
Other Manufactured Tobacco, viz.:						
Cigarettes	"			0	5	8
Other sorts	"			0	4	8
Snuff containing more than 13lbs. of moisture in every 100lbs. weight thereof	"			0	4	5
Snuff not containing more than 13lbs. of moisture in every 100lbs. weight thereof	"			0	5	4
Unmanufactured, if Stripped or Stemmed:—						
Containing 10lbs. or more of moisture in every 100lbs. weight thereof	"			0	3	8½
Containing less than 10lbs. of moisture in every 100lbs. weight thereof	"			0	4	1½
Unmanufactured, if Unstripped or Unstemmed:—						
Containing 10lbs. or more of moisture in every 100lbs. weight thereof	"			0	3	8
Containing less than 10lbs. of moisture in every 100lbs. weight thereof	"			0	4	1
WINE:—						
Not exceeding 30° of Proof Spirit	per gallon.			0	1	3
Exceeding 30° but not exceeding 42° of Proof Spirit....	"			0	3	0
And for every degree or part of a degree beyond the highest above charged, an additional duty	"			0	0	3
Additional:—On Still Wine imported in Bottles	"			0	1	0
On Sparkling Wine imported in Bottles ..	"			0	2	6

An allowance or repayment of the duty is made in respect of Motor Spirit used for other purposes than supplying motive power to Motor Cars, and of half the duty payable if the Spirit is to be used for supplying motive power to Motor Cars employed for commercial, &c., purposes.

AVERAGE PRICE PER £100 OF THE NEW TWO-AND-A-HALF* PER CENT. CONSOLIDATED STOCK OF THE PUBLIC FUNDS OF THE UNITED KINGDOM IN EACH MONTH IN EACH YEAR FROM 1897 TO 1913.

MONTHS.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
January	£ 112	112½	111	100½	96½	94	93½	87½	88½	89½	86½	84½	83½	82½	79½	77½	75½
February	112½	112½	111½	101	97½	94½	92½	86½	89½	90½	86½	87½	84½	81½	80½	78½	74½
March	111½	111½	110½	101½	96½	94	91½	86	91½	90½	85½	87½	84	81½	81½	77½	73½
April	112	110½	110½	100½	95½	94½	91½	88	90½	90½	85½	87½	85½	81½	81½	78½	74½
May	113½	110½	110½	101½	94½	95½	92½	90½	90½	89½	84½	86½	85½	81½	81½	78	75
June	112½	111½	108½	101½	93½	96½	91½	90½	90½	88½	83½	87½	84½	82½	79½	76½	73½
July	112½	111½	106½	98½	92½	95	92½	89½	90½	87½	83½	87½	84½	82	78½	75½	72½
August	112½	110½	105½	98½	94½	95	90½	88	90½	87½	82½	86½	84½	81½	78½	75½	73½
September ..	111½	109½	104½	98½	93½	93	89½	88½	89½	86½	82½	85½	83½	80½	77½	74½	73½
October	111½	109½	103½	98½	92½	93½	88½	88½	88½	86½	82½	84½	82½	79½	77½	73½	72½
November ..	112½	110½	99½	98½	91½	93	88½	88½	88½	86½	82½	84½	82½	79½	78½	74½	72½
December	112½	110½	100½	97½	93½	92½	88½	88½	89½	86½	82½	83½	82½	79½	77½	74½	71½
Average for the year..	112½	110½	106½	99½	94½	94½	90½	88½	89½	88½	84½	86½	83½	81½	79½	76½	73½

* The rate of interest on Consols was reduced from 2½ per cent. to 2¼ per cent. on April 6th, 1908, and the first dividends at the lower rate became payable on July 6th, 1909.

AVERAGE MINIMUM RATE PER CENT. OF DISCOUNT CHARGED BY THE BANK OF ENGLAND IN EACH MONTH
IN EACH YEAR FROM 1898 TO 1913.

MONTHS.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	MONTHS.
Jan.....	3	3 $\frac{3}{4}$	4 $\frac{1}{8}$	4 $\frac{1}{8}$	3 $\frac{1}{2}$	4	4	3	4	5 $\frac{1}{2}$	5 $\frac{3}{8}$ ₁₀₀	2 $\frac{7}{8}$ ₁₀₀	3 $\frac{8}{100}$	4 $\frac{3}{8}$	4	5	Jan.
Feb.....	3	3 $\frac{1}{2}$	4	4 $\frac{1}{8}$	3 $\frac{1}{2}$	4	4	3	4	5	4	3	3 $\frac{1}{8}$ ₁₀₀	3 $\frac{7}{8}$ ₁₀₀	3 $\frac{6}{100}$	5	Feb.
March...	3	3	4	4	3	4	4	2 $\frac{6}{8}$ ₁₀₀	4	5	3 $\frac{3}{8}$ ₁₀₀	3	3 $\frac{4}{8}$ ₁₀₀	3 $\frac{1}{8}$ ₁₀₀	3 $\frac{1}{2}$	5	March.
April....	3 $\frac{1}{8}$	3	4	4	3	4	3 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{9}{16}$	4 $\frac{9}{16}$	3	2 $\frac{1}{2}$	4	3	3 $\frac{1}{2}$	4 $\frac{7}{8}$ ₁₀₀	April.
May.....	3 $\frac{7}{8}$	3	3 $\frac{1}{8}$	4	3	3 $\frac{5}{8}$	3	2 $\frac{1}{2}$	3 $\frac{3}{8}$	4	2 $\frac{9}{16}$ ₁₀₀	2 $\frac{1}{2}$	4	3	3 $\frac{1}{8}$ ₁₀₀	4 $\frac{1}{2}$	May.
June....	3	3	3 $\frac{3}{8}$	3 $\frac{1}{2}$	3	3 $\frac{1}{2}$	3	2 $\frac{1}{2}$	3 $\frac{5}{8}$	4	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{16}$ ₁₀₀	3	3	4 $\frac{1}{2}$	June.
July....	2 $\frac{1}{2}$	3 $\frac{5}{8}$	3 $\frac{3}{8}$	3	3	3	3	2 $\frac{1}{2}$	3 $\frac{1}{2}$	4	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3	3	4 $\frac{1}{2}$	July.
August..	2 $\frac{1}{2}$	3 $\frac{1}{2}$	4	3	3	3	3	2 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{3}{8}$ ₁₀₀	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3	3	3 $\frac{1}{100}$	4 $\frac{1}{2}$	August.
Sept....	2 $\frac{5}{8}$	3 $\frac{1}{2}$	4	3	3	3 $\frac{9}{16}$	3	3	3 $\frac{5}{8}$	4 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{7}{16}$	3 $\frac{3}{16}$ ₁₀₀	4	4 $\frac{1}{2}$	Sept.
Oct.....	3 $\frac{5}{8}$	4 $\frac{7}{8}$	4	3 $\frac{3}{16}$	3 $\frac{3}{8}$ ₁₀₀	4	3	4	5 $\frac{1}{16}$ ₁₀₀	4 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{5}{16}$ ₁₀₀	4 $\frac{3}{8}$ ₁₀₀	4	4 $\frac{4}{100}$	4 $\frac{3}{8}$ ₁₀₀	October.
Nov.....	4	5 $\frac{3}{16}$ ₁₀₀	4	4	4	4	3	4	6	6 $\frac{3}{8}$	2 $\frac{1}{2}$	5	5	4	5	5	Nov.
Dec.....	4	6	4	4	4	4	3	4	6	7	2 $\frac{1}{2}$	4 $\frac{5}{8}$ ₁₀₀	4 $\frac{5}{16}$ ₁₀₀	4	5	5	Dec.
Average for the year..	3 $\frac{1}{4}$	3 $\frac{3}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{8}$	3 $\frac{1}{2}$	3 $\frac{3}{8}$	3 $\frac{1}{2}$	3 $\frac{1}{100}$	4 $\frac{1}{16}$	4 $\frac{3}{16}$	3	3 $\frac{1}{16}$	3 $\frac{7}{16}$	3 $\frac{4}{16}$	3 $\frac{7}{16}$	4 $\frac{7}{16}$	Average for the year.

DEALINGS WITH LAND.

SCALE OF LAW COSTS ON THE SALE, PURCHASE, OR MORTGAGE OF REAL PROPERTY, HOUSES, OR LAND.

	For the 1st £1,000.	For the 2nd and 3rd £1,000.	For the 4th and each subsequent £1,000 up to £10,000.	For each subsequent £1,000 up to £100,000.*
	Per £100. £ s. d.	Per £100. £ s. d.	Per £100. £ s. d.	Per £100. £ s. d.
Vendor's solicitor for negotiating a sale of property by private contract	1 0 0	1 0 0	0 10 0	0 5 0
Do., do., for conducting a sale of property by public auction, including the conditions of sale—				
When the property is sold† ...	1 0 0	0 10 0	0 5 0	0 2 6
When the property is not sold, then on the reserve price† ..	0 10 0	0 5 0	0 2 6	0 1 3
Do., do., for deducing title to freehold, copyhold, or leasehold property, and perusing and completing conveyance (including preparation of contract or conditions of sale, if any)	1 10 0	1 0 0	0 10 0	0 5 0
Purchaser's solicitor for negotiating a pur- chase of property by private contract..	1 0 0	1 0 0	0 10 0	0 5 0
Do., do., for investigating title to free- hold, copyhold, or leasehold property, and preparing and completing con- veyance (including perusal and com- pletion of contract, if any)	1 10 0	1 0 0	0 10 0	0 5 0
Mortgager's solicitor for deducing title to freehold, copyhold, or leasehold property, perusing mortgage, and completing....	1 10 0	1 0 0	0 10 0	0 5 0
Mortgagee's solicitor for negotiating loan	1 0 0	1 0 0	0 5 0	0 2 6
Do., do., for investigating title to freehold, copyhold, or leasehold property, and preparing and completing mortgage ..	1 10 0	1 0 0	0 10 0	0 5 0

Vendor's or mortgager's solicitor for procuring execution and acknowledgment of deed by a married woman, £2. 10s. extra.

Where the prescribed remuneration would amount to less than £5 the prescribed remuneration is £5, except on transactions under £100, in which case the remuneration of the solicitor for the vendor, purchaser, mortgager, or mortgagee is £3.

* Every transaction exceeding £100,000 to be charged for as if it were for £100,000.

† A minimum charge of £5 to be made whether a sale is effected or not.

Dealings with Land.

Scale of Law Costs as to Leases, or Agreements for Leases, at Rack Rent (other than a Mining Lease, or a Lease for Building Purposes, or Agreement for the same).

LESSOR'S SOLICITOR FOR PREPARING, SETTLING, AND COMPLETING LEASE AND COUNTERPART.

Where the rent does not exceed £100, £7. 10s. per cent. on the rental, but not less in any case than £5.

Where the rent exceeds £100, and does not exceed £500, £7. 10s. in respect of the first £100 of rent, and £2. 10s. in respect of each subsequent £100 of rent.

Where the rent exceeds £500, £7. 10s. in respect of the first £100 of rent, £2. 10s. in respect of each £100 of rent up to £500, and £1 in respect of every subsequent £100.

Lessee's solicitor for perusing draft and completing—one-half of the amount payable to the lessor's solicitor.

Scale of Law Costs as to Conveyances in Fee, or for any other Freehold Estate reserving rent, or Building Leases reserving rent, or other Long Leases not at Rack Rent (except Mining Leases), or Agreements for the same respectively.

VENDOR'S OR LESSOR'S SOLICITOR FOR PREPARING, SETTLING, AND COM- PLETING CONVEYANCE AND DUPLICATE, OR LEASE AND COUNTERPART.

Amount of Annual Rent.	Amount of Remuneration.
Where it does not exceed £5..	£5.
Where it exceeds £5, and does not exceed £50	The same payment as on a rent of £5, and also 20 per cent. on the excess beyond £5.
Where it exceeds £50, but does not exceed £150	The same payment as on a rent of £50, and 10 per cent. on the excess beyond £50.
Where it exceeds £150	The same payment as on a rent of £150, and 5 per cent. on the excess beyond £150.

Where a varying rent is payable the amount of annual rent is to mean the largest amount of annual rent.

Purchaser's or lessee's solicitor for perusing draft and completing—one-half of the amount payable to the vendor's or lessor's solicitor.

THE DEATH DUTIES.

ESTATE DUTY.

THIS duty, which in the case of persons dying after the 1st August, 1894, takes the place of the old Probate Account and Estate Duties, is now regulated by the Finance Acts, 1894, 1896, 1898, 1900, 1907, 1910, and 1914.

It is payable on the principal value of all property (save in a few exceptional cases), whether real or personal, settled or not settled, which passes on death.

The rates of duty (which in case of real estate may be paid by instalments) are as follow:—

PRINCIPAL NET VALUE OF ESTATE.				RATE PER CENT.
Above	£100, but not above	£500		1
"	500 " "	1,000		2
"	1,000 " "	5,000		3
"	5,000 " "	10,000		4
"	10,000 " "	20,000		5
"	20,000 " "	40,000		6
"	40,000 " "	60,000		7
"	60,000 " "	80,000		8
"	80,000 " "	100,000		9
"	100,000 " "	150,000		10
"	150,000 " "	200,000		11
"	200,000 " "	250,000		12
"	250,000 " "	300,000		13
"	300,000 " "	350,000		14
"	350,000 " "	400,000		15
"	400,000 " "	500,000		16
"	500,000 " "	600,000		17
"	600,000 " "	800,000		18
"	800,000 " "	1,000,000		19
"	1,000,000			20

Where the net value of the estate (real and personal) does not exceed £100, no duty is payable.

The Death Duties.

Where the gross value of the estate (real and personal) exceeds £100, but does not exceed £300, the duty is only 30s., and where it exceeds £300, but does not exceed £500, only 50s.

Debts and funeral expenses are deducted before calculating the duty, except where the gross value of the estate does not exceed £500, and it is desired to pay the fixed duty of 30s. or 50s., as the case may be, instead of the *ad valorem* duty.

In the case of a person dying from wounds inflicted or disease contracted while on active service provision is made whereby the death duties on the property passing to his widow, lineal descendants, or lineal ancestors may, to a certain extent, be remitted.

LEGACY DUTY.

This duty is regulated by 55 Geo. III., cap. 184, 51 Vict., cap. 8, and the Finance Acts, 1894 and 1910, and is payable in respect of personal estate (including proceeds of sale of real estate) passing on death, either under a will or in case of intestacy.

The rates of duty are as follow:—

DESCRIPTION OF LEGATEE.	RATE OF DUTY.
Husband or wife of the deceased (except in the cases mentioned below)	£1 per cent.
Children of the deceased and their descendants, or the father or mother or any lineal ancestor of the deceased or the husbands or wives of any such persons (except in the cases mentioned below)	£1 "
Brothers and sisters of the deceased and their descendants, or the husbands or wives of any such persons.....	£5 "
Any person in any other degree of collateral consanguinity or strangers in blood to the deceased.....	£10 "

SUCCESSION DUTY.

This duty is regulated by 16 and 17 Vict., cap. 51, 51 Vict., cap. 8, and the Finance Acts, 1894, 1896, and 1910, and is payable in respect of real estate (including leaseholds) passing on death, and in certain cases in respect of settled personal estate.

The rates of duty are the same as those payable in respect of legacies.

The Death Duties.

NOTE.—Where the duty under the foregoing table is at the rate of £1 per cent., an extra duty at the rate of 10s. per cent., and in all other cases an extra duty at the rate of £1. 10s. per cent., is leviable in respect of legacies payable out of or charged on real estate (not including leaseholds) and of successions to real estate (not including leaseholds) on deaths between the 1st July, 1888, and the 2nd August, 1894.

A husband is exempt from legacy or succession duty where his wife's estate does not exceed £15,000 or the value of his legacy or succession does not exceed £1,000.

A wife is in like manner exempt where her husband's estate does not exceed £15,000 or the value of her legacy or succession does not exceed £2,000.

A child is in like manner exempt where the parents' estate does not exceed £15,000 or the value of such child's legacy or succession does not exceed £1,000, or if the child is under 21, £2,000.

Legacy duty is payable on the capital value, while succession duty is in certain cases payable on the capital value, and in other cases payable on the value of an annuity equal to the net income of the property, calculated according to the age of the successor.

Where the whole net value of the estate does not exceed £1,000, no legacy or succession duty is payable.

All pecuniary legacies, residues, or shares of residue, although not of the amount of £20, are subject to duty.

In case of persons dying domiciled in the United Kingdom, legacy duty is payable on all movable property wherever situate.

In case of persons dying domiciled abroad, no legacy duty is payable on movable property.



RULES BY WHICH THE PERSONAL ESTATES OF PERSONS DYING INTTESTATE ARE DISTRIBUTED.

If the Intestate die, leaving

His representatives take in the proportion following:—

Wife and child, or children	{ One-third to wife, rest to child or children; and if children are dead, then to the representatives (that is, their lineal descendants), except such child or children, not heirs-at-law, who had estate by settlement of intestate, or were advanced by him in his lifetime, equal to other shares.
Wife only, no relations	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, rest to Crown.
Wife, no near relations	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, rest to next-of-kin in equal degree to intestate, or their legal representatives.
No wife or child	{ All to next-of-kin and their legal representatives.
No wife, but child, children, or representatives of them, whether such child or children by one or more wives, ...	{ All to him, her, or them.
Children by two wives	{ Equally to all.
If no child, children, or representatives of them	{ All to next-of-kin in equal degree to intestate.
Child, and grandchild by deceased child	{ Half to child, half to grandchild, who takes by representation.
Husband	{ Whole to him.
Father, and brother or sister	{ Whole to father.
Mother, and brother or sister	{ Whole to them equally.
Wife, mother, brothers, sisters, and nieces (daughters of deceased brother or sister)	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, residue to mother, brothers, sisters, and nieces.
Wife, and father	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, and half to father.
Wife, brothers or sisters, and mother	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, half to brothers or sisters and mother.
Mother, but no wife, child, father, brother, sister, nephew, or niece	{ The whole to mother.
Wife, and mother	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, half to mother.

RULES BY WHICH THE PERSONAL ESTATES OF PERSONS DYING INTESTATE ARE DISTRIBUTED—continued.

If the Intestate die, leaving

His representatives take in the proportion following:—

Brother or sister of whole blood, and brother or sister of half blood.....	Equally to both.
Posthumous brother or sister, and mother	Equally to both.
Posthumous brother or sister, and brother or sister born in lifetime of father	Equally to both.
Father's father and mother's mother	Equally to both.
Uncle or aunt's children, and brother or sister's grandchildren.....	Equally to all.
Grandmother, uncle, or aunt	All to grandmother.
Two aunts, nephew and niece	Equally to all.
Uncle, and deceased uncle's child	All to uncle.
Uncle by mother's side, and deceased uncle or aunt's child	All to uncle.
Nephew by brother, and nephew by half-sister	Equally <i>per capita</i> .*
Nephew by deceased brother, and nephews and nieces by deceased sister	Each in equal shares <i>per capita</i> , and not <i>per stirpes</i> .
Brother, and grandfather	Whole to brother.
Brother's grandson, and brother or sister's daughter	All to brother or sister's daughter.
Brother, and two aunts	All to brother.
Brother, and wife	{ Up to £500, all to wife; all above the first £500, in each case, half to brother, half to wife.
Wife, mother, and children of a deceased brother (or sister)	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, a fourth to mother, and a fourth <i>per stirpes</i> to deceased brother's or sister's children.
Wife, brother, or sister, and children of a deceased brother or sister.....	{ Up to £500, all to wife; all above the first £500, in each case, half to wife, one-fourth to brother or sister, one-fourth to deceased brother's or sister's children <i>per stirpes</i> .
Brother or sister, and children of a deceased brother or sister.....	{ Half to brother or sister, half to children of deceased brother or sister <i>per stirpes</i> .
Grandfather, no nearer relation.....	All to grandfather.

* That is, taking individually, and not by representation. Thus, if A die, leaving three brothers or sisters, they each take an equal part of his effects in his or her own right. But if either of them die, leaving children, his children would take his share *per stirpes*, that is *through him*, and not in their own right.

By the Act 19 and 20 Vict., cap. 94, all special *local* customs relating to the estates of intestates are abolished so far as they affect personal property.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND, OF THE MOVABLE ESTATE OF A PERSON WHO HAS DIED INTTESTATE.

If a person die, leaving

His movable estate is divided in the following proportions:—

Wife	{ Estate not exceeding £500, whole to wife; exceeding £500, first £500 to wife, balance half to wife, other half to deceased's next-of-kin.*
Wife and child, or children	{ One-third to wife, remaining two-thirds to child, or among children equally.
Wife and children, and issue of predeceasing children	{ One-third to wife, one-third to children equally, and the remaining third between the children and the issue of the predeceasing children—the children taking <i>per capita</i> , the latter <i>per stirpes</i> .†
Wife and grandchildren	Half to wife, and half to grandchildren equally among them.
Wife, and his children by former marriages	One-third to wife, two-thirds to children equally.
Wife, and her children by last and prior marriages	One-third to wife, remaining two-thirds to <i>deceased's</i> children.
Children	Whole to children.
Children, and issue of predeceasing children	{ Half to children, remaining half between children <i>per capita</i> , and issue <i>per stirpes</i> .
Grandchildren	Equally to all.
Children by two or more marriages	Equally to all.
Father	Whole to father.
Mother	One-third to mother, other two-thirds to next-of-kin.

* In event of estate including heritage, this heading requires modification.

† *Per capita*, i.e., by the head; *per stirpes* (by descent), i.e., through their parent and not in their own right. Where property divides *per capita*, it is divided into as many shares as there are children where *per stirpes*, the share which would have fallen to the predeceasing parent if alive is divided equally among his children.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND, OF THE MOVABLE ESTATE OF A PERSON WHO HAS DIED INTTESTATE—continued.

If a person die, leaving

His movable estate is divided in the following proportions:—

Father and mother.....	Whole to father.
Father and mother, and brothers and sisters.....	Half to father, half to brothers and sisters equally.
Mother, and brothers and sisters.....	One-third to mother, remaining two-thirds to brothers and sisters.
Father, mother, brothers, or sisters, and issue of deceased brothers or sisters.....	{ Half to father, half to brothers and sisters <i>per capita</i> , and issue <i>per stirpes</i> .
Mother, brothers, or sisters, and issue of deceased brothers or sisters.....	One-third to mother, remaining two-thirds as in last example.
Father and mother, and their grandchildren.....	Half to father, other half to grandchildren equally.
Mother, and her grandchildren.....	One-third to mother, other two-thirds to grandchildren equally.
Father, mother, children, and grandchildren of deceased brothers or sisters.....	{ Half to father, other half between children <i>per capita</i> , and grandchildren <i>per stirpes</i> .
Mother, children, and grandchildren of deceased brothers or sisters.....	{ One-third to mother, other two-thirds among children <i>per capita</i> , and grandchildren <i>per stirpes</i> .
Brothers or sisters.....	Equally among them.
Brothers or sisters, and nephews or nieces.....	.. Brothers or sisters <i>per capita</i> , nephews or nieces <i>per stirpes</i> .
Nephews or nieces.....	Equally.
Grandnephews or nieces.....	Equally.
Brothers or sisters of full blood, and brothers or sisters of half-blood.....	Whole to brothers and sisters of full blood.
Brothers or sisters consanguinean (that is, by same father but not same mother) and brothers or sisters uterine (that is, by same mother but not by same father).....	Whole to brothers and sisters consanguinean.

RULES OF DIVISION, ACCORDING TO THE LAW OF SCOTLAND, OF THE MOVABLE ESTATE OF A PERSON WHO HAS DIED INTESTATE—*continued.*

If a person die, leaving

His movable estate is divided in the following proportions:—

Brothers or sisters consanguinean, and uncles or aunts	Whole to brothers and sisters.
Brothers and sisters uterine, and uncles or aunts	Half to brothers and sisters, other half to uncles and aunts.
Father, mother, and uncles and aunts	Whole to father.
Father, and cousins of full blood	Whole to father.
Mother, and uncles or aunts	One-third to mother, two-thirds to uncles and aunts.
Mother, and cousins of full blood	One-third to mother, two-thirds to cousins equally.
Grandfather, and uncles and aunts	Whole to uncles and aunts.
Grandfather, grandmother, and mother	One-third to mother, two-thirds to grandfather.

Where a wife dies, survived by

Her movable estate is divided in the following proportions:—

Husband	Half to husband, other half to next-of-kin.
Husband and children	One-third to husband, rest to children.
Children only	Whole to children.
Children, and issue of deceased children	{ Half to children, other half among children <i>per capita</i> , and issue <i>per stirpes</i> .
Children by two or more marriages	Equally to all.

Illegitimate children do not succeed to their father and mother, when the latter leave no will in their favour. When an illegitimate child dies without a will, and leaves neither wife nor children, his estate falls to the Crown.

EXPECTATION OF LIFE.

EXPECTATION OF LIFE TABLES were constructed by the late Dr. Farr, of the General Register Office, and were calculated on the death-rates of 1888-54; but since that time very important changes have occurred in the death-rates at different ages; and, consequently, new tables have been constructed by Dr. W. Ogle, who succeeded Dr. Farr, on the basis of the death-rates of 1871-80. The following table gives the results both of the older and the later calculations; the first two columns in the male and female parts, respectively, giving the survivors at each year of life out of a million born of the corresponding sex, by the older and the newer calculation, and the two other columns giving similarly the expectation of life at each year.

AGE.	MALES.				FEMALES.				AGE.		
	OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.			MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).	OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.			MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).			
	1888-54.		1871-80.		1888-54.		1871-80.				
	Column.	1	2	3	4	5	6	7		8	Column.
0											
1	1,000,000	1,000,000	39-91	41-35	1,000,000	1,000,000	41-85	44-62	0	41-85	44-62
2	836,405	841,417	46-65	48-05	865,288	871,266	47-31	50-14	1	47-31	50-14
3	782,626	790,201	48-83	50-14	811,711	820,480	49-40	52-22	2	49-40	52-22
4	754,849	763,737	49-61	50-86	782,990	793,359	50-20	52-99	3	50-20	52-99
5	736,845	746,587	49-81	51-01	764,060	775,427	50-43	53-20	4	50-43	53-20
6									5		
7	723,716	734,068	49-71	50-87	750,550	762,622	50-33	53-08	6	50-33	53-08
8	713,881	726,815	49-39	50-38	740,584	755,713	50-00	52-56	7	50-00	52-56
9	706,156	721,103	48-92	49-77	732,771	750,276	49-53	51-94	8	49-53	51-94
10	699,688	716,309	48-37	49-10	726,116	745,631	48-98	51-26	9	48-98	51-26
11	694,346	712,337	47-74	48-37	720,537	741,727	48-35	50-53	10	48-35	50-53
12									11		
13	689,857	708,990	47-05	47-60	715,769	738,382	47-67	49-76	12	47-67	49-76
14	685,982	706,146	46-31	46-79	711,581	735,405	46-95	48-96	13	46-95	48-96
15	682,512	703,595	45-54	45-96	707,770	732,697	46-20	48-13	14	46-20	48-13
16	679,256	701,200	44-76	45-11	704,155	730,122	45-44	47-30	15	45-44	47-30
17	676,057	698,840	43-97	44-26	700,581	727,571	44-66	46-47	16	44-66	46-47

15	672,776	696,419	43-18	43-41	696,917	724,956	43-90	45-63	15
16	669,296	698,695	42-40	42-58	698,050	722,084	43-14	44-81	16
17	665,529	690,746	41-64	41-76	688,894	718,993	42-40	44-00	17
18	661,402	687,507	40-90	40-96	684,378	715,622	41-67	43-21	18
19	656,868	683,941	40-17	40-17	679,463	711,946	40-97	42-43	19
20	651,903	680,083	39-48	39-40	674,119	707,949	40-29	41-66	20
21	646,502	675,769	38-80	38-64	668,345	703,616	39-68	40-92	21
22	641,028	671,344	38-13	37-89	662,474	699,141	38-98	40-18	22
23	635,486	666,754	37-46	37-15	656,509	694,521	38-33	39-44	23
24	629,892	661,997	36-79	36-41	650,463	689,759	37-68	38-71	24
25	624,221	657,077	36-12	35-68	644,342	684,858	37-04	37-98	25
26	618,503	651,998	35-44	34-96	638,148	679,822	36-39	37-26	26
27	612,731	646,757	34-77	34-24	631,891	674,661	35-75	36-54	27
28	606,906	641,353	34-10	33-52	625,575	669,372	35-10	35-83	28
29	601,026	635,778	33-43	32-81	619,201	663,959	34-46	35-11	29
30	595,089	630,038	32-76	32-10	612,774	658,418	33-81	34-41	30
31	589,094	624,124	32-09	31-40	606,296	652,747	33-17	33-70	31
32	583,036	618,056	31-42	30-71	599,769	646,957	32-53	33-00	32
33	576,912	611,827	30-74	30-01	593,196	641,045	31-88	32-30	33
34	570,716	605,430	30-07	29-33	586,575	635,003	31-23	31-60	34
35	564,441	598,860	29-40	28-64	579,908	628,842	30-59	30-90	35
36	558,083	592,107	28-73	27-96	573,192	622,554	29-94	30-21	36
37	551,634	585,167	28-06	27-29	566,431	616,144	29-29	29-52	37
38	545,084	578,019	27-39	26-62	559,619	609,599	28-64	28-83	38
39	538,428	570,656	26-72	25-96	552,758	602,924	27-99	28-15	39
40	531,657	563,077	26-06	25-30	545,844	596,113	27-34	27-46	40
41	524,761	555,254	25-39	24-65	538,876	589,167	26-69	26-78	41
42	517,734	547,388	24-73	24-00	531,849	582,104	26-03	26-10	42
43	510,567	539,161	24-07	23-35	524,765	574,919	25-38	25-42	43
44	503,247	530,858	23-41	22-71	517,617	567,612	24-72	24-74	44

EXPECTATION OF LIFE—continued.

AGE.	MALES.				FEMALES.				AGE.
	OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.		MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).		OF 1,000,000 BORN, THE NUMBER SURVIVING AT THE END OF EACH YEAR OF LIFE.		MEAN AFTER-LIFETIME (EXPECTATION OF LIFE).		
	1898-54.	1871-80.	3	4	1898-54.	1871-80.	5	6	
	Column.	1	2		Column.	7	8		
45	495,770	522,374	22-76	22-07	510,403	560,174	24-06	24-06	45
46	488,126	513,702	22-11	21-44	503,122	552,602	23-40	23-38	46
47	480,308	504,836	21-46	20-80	495,768	544,892	22-74	22-71	47
48	472,806	495,761	20-82	20-18	488,339	537,043	22-08	22-03	48
49	464,114	486,479	20-17	19-55	480,833	529,048	21-42	21-36	49
50	455,727	476,980	19-54	18-93	473,245	520,901	20-75	20-68	50
51	447,139	467,254	18-90	18-31	465,572	512,607	20-09	20-01	51
52	438,099	457,032	18-28	17-71	457,814	504,188	19-42	19-34	52
53	428,801	446,510	17-67	17-12	449,966	495,645	18-75	18-66	53
54	419,256	435,729	17-06	16-53	442,047	486,973	18-08	17-98	54
55	409,460	424,677	16-45	15-95	433,331	477,440	17-43	17-33	55
56	399,408	413,351	15-86	15-37	424,239	467,443	16-79	16-69	56
57	389,088	401,740	15-26	14-80	414,761	456,992	16-17	16-06	57
58	378,481	389,827	14-68	14-24	404,895	446,079	15-55	15-45	58
59	367,570	377,591	14-10	13-68	394,636	434,695	14-94	14-84	59
60	356,330	365,011	13-53	13-14	383,974	422,835	14-34	14-24	60
61	344,744	352,071	12-96	12-60	372,895	410,477	13-75	13-65	61
62	332,789	338,820	12-41	12-07	361,387	397,644	13-17	13-08	62
63	320,451	325,256	11-87	11-56	349,436	384,319	12-60	12-51	63
64	307,720	311,368	11-34	11-05	337,031	370,495	12-05	11-96	64
65	294,588	297,156	10-82	10-55	324,165	356,165	11-51	11-42	65
66	281,064	282,638	10-32	10-07	310,833	341,326	10-98	10-90	66
67	267,160	267,829	9-83	9-60	297,048	325,988	10-47	10-39	67
68	252,901	252,763	9-36	9-14	282,819	310,170	9-97	9-89	68
69	238,328	237,487	8-90	8-70	268,177	293,899	9-48	9-41	69

70	228,490	222,056	8-45	8-27	253,161	277,225	9-02	8-95	70
71	208,453	206,539	8-03	7-85	237,822	260,207	8-57	8-50	71
72	198,297	190,971	7-62	7-45	222,280	225,497	8-13	8-07	72
73	178,114	175,449	7-22	7-07	206,464	225,497	7-71	7-65	73
74	168,003	160,074	6-85	6-70	190,620	208,003	7-31	7-25	74
75	148,076	144,960	6-49	6-34	174,800	190,566	6-93	6-87	75
76	138,453	130,227	6-15	6-00	159,126	173,316	6-56	6-51	76
77	119,251	115,986	5-82	5-68	143,722	156,392	6-21	6-16	77
78	105,592	102,359	5-51	5-37	128,711	139,927	5-88	5-82	78
79	92,587	89,449	5-21	5-07	114,229	124,065	5-56	5-50	79
80	80,343	77,354	4-93	4-79	100,394	108,935	5-26	5-20	80
81	68,946	66,153	4-66	4-51	87,323	94,662	4-98	4-90	81
82	58,471	55,842	4-41	4-26	75,119	81,905	4-71	4-63	82
83	48,970	46,489	4-17	4-01	63,862	68,966	4-45	4-37	83
84	40,471	38,132	3-95	3-58	53,615	57,723	4-21	4-12	84
85	32,979	30,785	3-73	3-56	44,419	47,631	3-98	3-88	85
86	26,476	24,436	3-53	3-36	36,284	38,710	3-76	3-66	86
87	20,926	19,054	3-34	3-17	29,202	30,958	3-56	3-46	87
88	16,268	14,576	3-16	2-99	23,135	24,338	3-36	3-26	88
89	12,438	10,926	3-00	2-82	18,027	18,788	3-18	3-08	89
90	9,321	8,015	2-84	2-66	13,802	14,225	3-01	2-90	90
91	6,859	5,748	2-69	2-51	10,376	10,553	2-85	2-74	91
92	4,946	4,025	2-55	2-37	7,650	7,658	2-70	2-58	92
93	3,492	2,749	2-41	2-24	5,526	5,429	2-55	2-44	93
94	2,411	1,828	2-29	2-12	3,908	3,756	2-42	2-30	94
95	1,628	1,183	2-17	2-01	2,704	2,533	2-29	2-17	95
96	1,071	742	2-06	1-90	1,827	1,661	2-17	2-11	96
97	688	452	1-95	1-81	1,204	1,057	2-06	2-03	97
98	430	266	1-85	1-72	774	653	1-96	1-83	98
99	262	151	1-76	1-65	483	389	1-86	1-73	99
100	145	82	1-68	1-61	295	225	1-76	1-62	100

RAILWAY ACCIDENTS.

NUMBER OF PERSONS KILLED AND INJURED ON RAILWAYS IN THE UNITED KINGDOM IN THE COURSE OF PUBLIC TRAFFIC DURING THE YEAR ENDED DECEMBER 31ST, 1913, AS REPORTED TO THE BOARD OF TRADE.

	TOTAL FOR THE YEAR 1913.		Total for the Year 1912.		INCREASE OR DECREASE.		AVERAGE FOR 1902 11.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
PASSENGERS:								
From accidents to trains, rolling-stock, permanent-way, &c.	33	723	20	682	+13	+41	19	585
By accidents from other causes	110	2,324	90	2,146	+20	+78	105	2,077
SERVANTS OF COMPANIES OR CONTRACTORS:*								
From accidents to trains, rolling-stock, permanent-way, &c.	8	145	6	154	+2	-9	9	138
By accidents from other causes	414	5,608	337	5,408	+77	+200	401	4,405
OTHER PERSONS:								
From accidents to trains, &c.	...	3	...	4	...	-1	1	10
Persons passing over railways at level-crossings	64	46	69	32	-5	+14	65	33
Trespassers (including suicides)	458	132	458	127	...	+5	447	127
Persons on business at stations, &c., and other persons not coming in above classifications	44	173	31	146	+13	+27	39	133
Total	1,131	9,054	1,011	8,699	+120	+355	1,086	7,508

* Of contractors' servants 9 were killed and 26 injured.

POPULATION.

TOTAL POPULATION OF EACH DIVISION OF THE UNITED KINGDOM AT EACH CENSUS FROM 1801 TO 1911.
(Compiled from the Census Reports for each Division of the United Kingdom.)

Census Years.	Total for United Kingdom.	England and Wales.	Scotland.	Ireland.
1801.....	....	8,892,536	1,608,420	*
1811.....	....	10,164,256	1,805,864	*
1821.....	20,898,584	12,000,236	2,091,521	6,801,827
1831.....	24,028,584	13,896,797	2,364,386	7,767,401
1841.....	26,709,456	15,914,148	2,620,184	8,175,124
1851.....	27,368,736	17,927,609	2,888,742	6,552,385
1861.....	28,927,485	20,066,224	3,062,294	5,798,967
1871.....	31,484,661	22,712,266	3,360,018	5,412,377
1881.....	34,884,848	25,974,439	3,735,573	5,174,836
1891.....	37,732,922	29,002,525	4,025,647	4,704,750
1901.....	41,458,721	32,527,843	4,472,103	4,458,775
1911.....	45,216,665	36,075,269	4,759,445	4,381,951

* The Census of Ireland in 1821 is the first which was made on such a basis as to afford a comparison with those of subsequent decades.

WRECKS.

NUMBER OF PASSENGERS AND CREW LOST BY WRECKS AND CASUALTIES AT SEA TO VESSELS BELONGING TO THE UNITED KINGDOM, EXCLUSIVE OF VESSELS OF THE ROYAL NAVY, IN THE YEARS 1898 TO 1912.

YEARS.	FROM SAILING VESSELS.			FROM STEAM VESSELS.			TOTAL.	
	Crew.	Passengers.	Total.	Crew.	Passengers.	Total.	Crew.	Passengers.
1898.....	442	20	462	430	80	510	872	100
1899.....	484	23	507	699	102	801	1,183	125
1900.....	564	12	576	549	38	587	1,113	50
1901.....	462	15	477	327	8	335	789	23
1902.....	225	13	238	460	674	1,134	685	687
1903.....	339	14	353	364	22	386	703	36
1904.....	287	18	305	305	9	314	592	27
1905.....	448	11	459	328	111	439	776	122
1906.....	250	7	257	180	5	185	430	12
1907.....	334	23	357	452	89	541	786	112
1908.....	311	10	321	282	88	370	593	98
1909.....	182	15	197	396	117	513	578	132
1910.....	267	13	280	526	141	667	793	154
1911.....	229	7	236	414	24	438	643	31
1912.....	169	12	181	1,217	837	* 2,054	1,386	849
								* 2,235

NOTE.—The losses of unregistered vessels (if any) are included in the above figures.
* Including 1,498 persons (673 crew and 825 passengers) on the s.s. Titanic.

WRECKS.

NUMBER AND NET TONNAGE OF VESSELS BELONGING TO THE UNITED KINGDOM TOTALLY LOST AT SEA,
EXCLUSIVE OF VESSELS OF THE ROYAL NAVY, IN THE YEARS 1898 TO 1912.

YEARS.	SAILING.		STEAM.		TOTAL.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
1898.....	288	52,409	125	111,686	413	164,095
1899.....	265	50,447	132	133,128	397	183,575
1900.....	253	64,005	132	95,998	385	160,003
1901.....	244	60,346	103	72,773	347	133,119
1902.....	241	45,010	94	59,325	335	104,335
1903.....	304	47,972	115	89,621	419	137,593
1904.....	202	41,254	120	101,589	322	142,843
1905.....	213	49,392	116	82,294	329	131,686
1906.....	231	50,210	126	98,004	357	148,214
1907.....	198	42,667	108	89,211	306	131,878
1908.....	228	37,482	136	109,657	364	147,139
1909.....	196	30,726	103	108,747	299	139,473
1910.....	195	32,547	124	117,613	319	150,160
1911.....	200	30,629	125	112,547	325	143,176
1912.....	165	20,428	134	142,800	299	163,228

NOTE.—The losses of unregistered vessels (if any) are included in the above figures.

THE KING AND ROYAL FAMILY.

THE KING.—GEORGE V., of the United Kingdom of Great Britain and Ireland, &c., King, Defender of the Faith. His Majesty was born June 3, 1865, married his cousin, Princess Victoria May, only daughter of the Duke of Teck, July 6, 1893. The children of His Majesty are: Edward, born June 23, 1894; Albert, December 14, 1895; Victoria Alexandra, April 25, 1897; Henry William Frederick Albert, March 31, 1900; George, December 20, 1902; and John Charles Francis, July 12, 1905.

PARLIAMENTS OF THE UNITED KINGDOM.

Assembled.	Dissolved.	Duration.	Assembled.	Dissolved.	Duration.
GEORGE III.		Yrs. m. d.	VICTORIA— <i>con.</i>		Yrs. m. d.
Sept. 27, 1796*	June 29, 1802	5 9 3	Nov. 18, 1847	July 1, 1852	4 7 14
Oct. 29, 1802	Oct. 25, 1806	3 11 27	Nov. 4, 1852	Mar. 1, 1857	4 4 18
Dec. 15, 1806	April 29, 1807	0 4 14	April 1, 1857	April 23, 1859	1 11 23
June 22, 1807	Sept. 29, 1812	5 3 7	May 31, 1859	July 6, 1865	6 1 6
Nov. 24, 1812	June 10, 1818	5 6 16	Feb. 1, 1866	Nov. 11, 1868	2 9 19
Jan. 14, 1819	Feb. 29, 1820	1 1 15	Dec. 10, 1868	Jan. 26, 1874	5 1 17
			Mar. 5, 1874	Mar. 28, 1880	6 0 19
GEORGE IV.			April 29, 1880	Nov. 18, 1885	5 6 20
April 23, 1820	June 2, 1826	6 1 9	Jan. 12, 1886	June 26, 1886	0 5 15
Nov. 14, 1826	July 24, 1830	3 8 10	Aug. 5, 1886	June 28, 1892	5 10 24
			Aug. 4, 1892	July 8, 1895	2 11 5
WILLIAM IV.			Aug. 12, 1895	Sept. 25, 1900	5 1 14
Oct. 26, 1830	April 22, 1831	0 5 27	Dec. 3, 1900		
June 14, 1831	Dec. 3, 1832	1 5 9	EDWARD VII.	Jan. 8, 1906	5 1 6
Jan. 29, 1833	Dec. 30, 1834	1 11 1	Feb. 14, 1901		
Feb. 19, 1835	July 17, 1837	2 4 28	Feb. 13, 1906	Jan. 10, 1910	3 10 26
			Feb. 15, 1910		
VICTORIA.			GEORGE V.	Nov. 28, 1910	0 9 13
Nov. 15, 1837	June 23, 1841	3 7 9	May 6, 1910		
Aug. 19, 1841	July 23, 1847	5 11 5	Feb. 1, 1911		

* Parliament first met after the Union with Ireland, January 22, 1801.

LIST OF ADMINISTRATIONS FROM DECEMBER, 1783.

Date.	Prime Minister.	Duration.	Chancellor.	Exchequer.	Home Secretary	Foreign Sec.
		Yrs. Dys.				
Dec. 23, 1783	William Pitt	17 84	{Thurlow .. Loughboro	William Pitt	Portland	Grenville.
Mar. 17, 1801	Hy. Addington	3 59	Eldon	H. Addington	{Portland, Pel- ham, C. Yorke	Hawkesbury.
May 15, 1804	William Pitt	1 272	Eldon	William Pitt	Hawkesbury	{Harrowby. Mulgrave.
Feb. 11, 1806	Lord Grenville	1 48	Erskine	Lord H. Petty	Spencer	{Chas. J. Fox. Visct. Howick.
Mar. 31, 1807	Duke of Portland	2 246	Eldon	S. Perceval	Hawkesbury	G. Canning.
Dec. 2, 1809	Spencer Perceval	2 190	Eldon	S. Perceval	R. Ryder	{Bathurst. Welllesley.
June 9, 1812	Earl of Liverpool	14 319	Eldon	{N. Vansittart. F. J. Robinson	Sidmouth .. Robert Peel	Castlereagh. G. Canning.
Apr. 24, 1827	George Canning	0 134	Lyndhurst	G. Canning	{Sturges Bourne. Lansdowne	Dudley.
Sept. 5, 1827	Visct. Goderich	0 142	Lyndhurst	J. C. Herries	Lansdowne	Dudley.
Jan. 25, 1828	D. of Wellington	2 301	Lyndhurst	H. Goulburn	Robert Peel	{Dudley. Aberdeen.
Nov. 22, 1830	Earl Grey	3 238	Brougham	Althorp	Melbourne	Palmerston.
July 18, 1834	Visct. Melbourne	0 161	Brougham	Althorp	Duncannon	Palmerston.
Dec. 26, 1834	Sir Robert Peel	0 113	Lyndhurst	Sir R. Peel	H. Goulburn	Wellington.
Apr. 18, 1835	Visct. Melbourne	6 141	{In Comm.. Cottenham	T. S. Rice .. F. T. Barring	Lord J. Russell Normanby	Palmerston.
Sept. 6, 1841	Sir Robert Peel	4 303	Lyndhurst	H. Goulburn	Sir J. Graham	Aberdeen.
July 6, 1846	Ld. John Russell	5 236	{Cottenham Truro	Sir C. Wood	Sir George Grey	{Palmerston. Granville.
Feb. 27, 1852	Earl of Derby	0 305	St Leonards	B. Disraeli	S. H. Walpole	Malmesbury.
Dec. 28, 1852	Earl of Aberdeen	2 44	Cranworth	W. Gladstone.	Palmerston	{Lord J. Russell. Clarendon.
Feb. 10, 1855	Lord Palmerston	3 15	Cranworth	{W. Gladstone. Sir G. C. Lewis	Sir George Grey	Clarendon.
Feb. 25, 1858	Earl of Derby	1 113	Chelmsford	B. Disraeli	S. H. Walpole	Malmesbury.
June 18, 1859	Lord Palmerston	6 141	{Campbell .. Westbury	W. Gladstone	{Sir G. C. Lewis. Sir George Grey	Russell.
Nov. 6, 1865	Earl Russell	0 242	Cranworth	W. Gladstone	Sir George Grey	Clarendon.
July 6, 1866	Earl of Derby	1 236	Chelmsford	B. Disraeli	{S. H. Walpole .. Gathorne Hardy	Stanley.
Feb. 27, 1868	Benjamin Disraeli	0 285	Cairns	G. W. Hunt	G. Hardy	Stanley.
Dec. 9, 1868	W. E. Gladstone	5 74	{Hatherley .. Selborne	Robert Lowe W. E. Gladstone	H. A. Bruce .. Robert Lowe	Clarendon. Granville.
Feb. 21, 1874	{Benjamin Disraeli Earl Beaconsfield	6 67	Cairns	S. Northcote	R. A. Cross	{Derby. Salisbury.
Apr. 28, 1880	W. E. Gladstone	5 57	Selborne	{W. Gladstone. H. C. E. Childers	Sir W. Harcourt	Granville.
June 24, 1885	Marq. of Salisbury	0 227	Halsbury	Hicks-Beach	R. A. Cross	Salisbury.
Feb. 7, 1886	W. E. Gladstone	0 139	Herschel	W. V. Harcourt	H. C. E. Childers	Rosebery.
July 24, 1886	Marq. of Salisbury	6 17	Halsbury	{Lord Churchill G. J. Goschen	H. Matthews	{Idesleigh Salisbury.
Aug. 15, 1892	W. E. Gladstone	2 313	Herschel	W. V. Harcourt	H. H. Asquith	{Rosebery. Kimberley.
Mar. 3, 1894	Earl of Rosebery					
June 24, 1895	Marq. of Salisbury	11 165	Halsbury	{Hicks-Beach .. C. T. Ritchie .. A. Chamberlain	{Sir M. W. Ridley C. T. Ritchie .. A. Akers Douglas	{Salisbury. Lansdowne.
July 12, 1902	A. J. Balfour					
Dec. 5, 1905	Sir H. Campbell- Bannerman		{Loreburn Haldane	{H. H. Asquith .. D. Lloyd George	{H. J. Gladstone W. S. Churchill R. McKenna	Sir Ed. Grey.
April 7, 1908	H. H. Asquith					

PRESIDENTS OF THE UNITED STATES OF AMERICA.

	Inauguration Year.
<i>Declaration of Independence</i>	4th July, 1776
General Washington, first President	1789 and 1793
John Adams	1797
Thomas Jefferson	1801 and 1805
James Madison	1809 and 1813
James Monroe	1817 and 1821
John Quincy Adams	1825
General Andrew Jackson	1829 and 1833
Martin Van Buren	1837
General William Henry Harrison (died 4th April)	1841
John Tyler (previously Vice-President)	1841
James Knox Polk	1845
General Zachary Taylor (died 9th July, 1850)	1849
Millard Fillmore (previously Vice-President)	1850
General Franklin Pierce	1853
James Buchanan	1857
Abraham Lincoln (assassinated 14th April, 1865)	1861 and 1865
Andrew Johnson (previously Vice-President)	1865
General Ulysses S. Grant	1869 and 1873
Rutherford Richard Hayes, after long contest with Tilden	1877
General Garfield (shot July 2; died September 19)	1881
Chester A. Arthur, Vice-President, succeeded September 20	1881
Grover Cleveland	1885
General Benjamin Harrison	1889
Grover Cleveland	1893
William M'Kinley	1897
William M'Kinley (shot September 6th, 1901; died September 14th)	1901
Theodore Roosevelt	1901
" " re-elected	1905
William Howard Taft	1909
Woodrow Wilson	1913

The United States of America form a Federal Republic, consisting of 45 States and 5 Territories.

THE TIME ALL OVER THE WORLD.

When the clock at Greenwich points to Noon the time at the various places is as follows:—

	H.	M.		H.	M.
Boston, U.S.	7	18 a.m.	Copenhagen	12	50 p.m.
Dublin	11	35 a.m.	Florence	12	45 p.m.
Edinburgh	11	47 a.m.	Jerusalem	2	21 p.m.
Glasgow	11	43 a.m.	Madras	5	21 p.m.
Lisbon	11	43 a.m.	Malta	12	58 p.m.
Madrid	11	45 a.m.	Melbourne, Australia	9	40 p.m.
New York, U.S.	7	14 a.m.	Moscow	2	30 p.m.
Penzance	11	38 a.m.	Munich	12	46 p.m.
Philadelphia, U.S.	6	59 a.m.	Paris	12	9 p.m.
Quebec	7	15 a.m.	Pekin	7	46 p.m.
Adelaide, Australia	9	11 p.m.	Prague	12	58 p.m.
Amsterdam	12	19 p.m.	Rome	12	50 p.m.
Athens	1	35 p.m.	Rotterdam	12	18 p.m.
Berlin	12	54 p.m.	St. Petersburg	2	1 p.m.
Berne	12	30 p.m.	Suez	2	10 p.m.
Bombay	4	52 p.m.	Sydney, Australia	10	5 p.m.
Brussels	12	17 p.m.	Stockholm	1	12 p.m.
Calcutta	5	54 p.m.	Stuttgart	0	37 p.m.
Capetown	1	14 p.m.	Vienna	1	6 p.m.
Constantinople	1	56 p.m.			

Hence, by a little calculation, the time for those places at any hour of our day may be ascertained. At places east of London the apparent time is later, and west of London, earlier; for uniformity sake, however, Greenwich time is kept at all railways in Great Britain and Ireland.

TOTAL GROSS AMOUNT OF INCOME BROUGHT UNDER THE REVIEW OF THE INLAND REVENUE DEPARTMENT.

Year.	England.	Scotland.	Ireland.	United Kingdom.	Year.
	£	£	£	£	
1896-7	607,112,810	65,350,653	32,278,145	704,741,608	1896-7
1897-8	633,293,018	68,548,264	32,619,964	734,461,246	1897-8
1898-9	657,212,406	72,209,602	33,245,301	762,667,309	1898-9
1899-1900	682,020,599	76,213,242	33,501,572	791,735,413	1899-1900
1900-1	719,354,160	79,962,343	34,039,010	833,355,513	1900-1
1901-2	749,127,300	83,515,877	34,350,276	866,993,453	1901-2
1902-3	760,844,311	84,218,290	34,575,945	879,638,546	1902-3
1903-4	781,661,273	86,004,343	35,092,969	902,758,585	1903-4
1904-5	789,681,212	87,010,655	35,437,813	912,129,680	1904-5
1905-6	801,690,717	87,150,635	36,343,204	925,184,556	1905-6
1906-7	816,854,364	88,749,171	38,098,479	943,702,014	1906-7
1907-8	848,548,633	92,589,090	38,979,277	980,117,000	1907-8
1908-9	873,994,849	96,204,055	39,737,022	1,009,935,926	1908-9
*1909-10	877,888,487	93,020,031	40,191,827	1,011,100,345	*1909-10
*1910-1	909,959,166	95,215,223	40,659,386	1,045,833,775	*1910-1
1911-2	933,437,158	95,623,998	41,081,187	1,070,142,343	1911-2
1912-3	970,093,487	99,884,044	41,478,932	1,111,456,413	1912-3

* Owing to the delay in passing the Finance Bill for 1909-10, the figures for that year are somewhat below, and those for the year 1910-1 somewhat above, normal.

BAROMETER INSTRUCTIONS.

COMPILED BY THE LATE ADMIRAL FITZROY, F.R.S.

The barometer should be set regularly by a duly-authorised person, about sunrise, noon, and sunset.

The words on scales of barometers should not be so much regarded for weather indications as the RISING or FALLING of the mercury; for if it stand at CHANGEABLE (29.50) and then rise towards FAIR (30.00) it presages a change of wind or weather, though not so great as if the mercury had risen higher; and, on the contrary, if the mercury stand above FAIR and then fall it presages a change, though not to so great a degree as if it had stood lower; beside which, the direction and force of wind are not in any way noticed.

It is not from the point at which the mercury may stand that we are alone to form a judgment of the state of the weather, but from its RISING or FALLING, and from the movements of immediately PRECEDING days as well as hours, keeping in mind effects of change of DIRECTION, and dryness or moisture, as well as alteration of force or strength of wind.

It should always be remembered that the state of the air FORETELLS COMING weather rather than shows the weather that is PRESENT—an invaluable fact too often overlooked—that the longer the time between the signs and the change foretold by them the longer such altered weather will last; and, on the contrary, the less the time between a warning and a change the shorter will be the continuance of such foretold weather.

If the barometer has been about its ordinary height, say near 30 inches at the sea-level, and is steady on rising, while the thermometer falls and dampness becomes less, north-westerly, northerly, north-easterly wind, or less wind, less rain or snow may be expected.

On the contrary, if a fall takes place with a rising thermometer and increased dampness, wind and rain may be expected from the south-eastward, southward, or south-westward. A fall with low thermometer foretells snow.

When the barometer is rather below its ordinary height, say down to near 29½ inches (at sea-level), a rise foretells less wind, or a change in its direction towards the northward, or less wet; but when it has been very low, about 29 inches, the first rising usually precedes or indicates strong wind—at times heavy squalls—from the north-westward, northward, or north-eastward, AFTER which violence a gradually rising glass foretells improving weather; if the thermometer falls, but if the warmth continues, probably the wind will back (shift against the sun's course), and more southerly or south-westerly wind will follow, especially if the barometer rise is sudden.

The most dangerous shifts of wind, or the HEAVIEST northerly gales, happen soon after the barometer first rises from a very low point; or if the wind veers GRADUALLY at some time afterwards.

Barometer Instructions.

Indications of approaching change of weather and the direction and force of winds are shown less by the height of the barometer than by its falling or rising. Nevertheless, a height of more than 30 (30·00) inches (at the level of the sea) is indicative of fine weather and MODERATE winds, except from east to north, OCCASIONALLY.

A rapid rise of the barometer indicates unsettled weather, a slow movement the contrary; as likewise a STEADY barometer, when continued and with dryness, foretells very fine weather.

A rapid and considerable fall is a sign of stormy weather, and rain or snow. Alternate rising and sinking indicates unsettled or threatening weather.

The greatest depressions of the barometer are with gales from S.E., S., or S.W.; the greatest deviations, with wind from N.W., N., or N.E., or with calm.

A sudden fall of the barometer, with a westerly wind, is sometimes followed by a violent storm from N.W., N., or N.E.

If a gale sets in from the E. or S.E., and the wind veers by the south, the barometer will continue falling until the wind is near a marked change, when a lull MAY occur; after which the gale will soon be renewed, perhaps suddenly and violently, and the veering of the wind towards the N.W., N., or N.E. will be indicated by a rising of the barometer, with a fall of the thermometer.

After very warm and calm weather a storm or squall, with rain, may follow; likewise at any time when the atmosphere is HEATED much above the USUAL temperature of the season.

To know the state of the air not only the barometer AND THERMOMETER, but appearances of the sky should be vigilantly watched.

SIGNS OF WEATHER.

Whether clear or cloudy, a rosy sky at sunset presages fine weather; a red sky in the morning, bad weather or much wind, perhaps rain; a grey sky in the morning, fine weather; a high dawn, wind; a low dawn, fair weather.*

Soft-looking or delicate clouds foretell fine weather, with moderate or light breezes; hard-edged, oily-looking clouds, wind. A dark, gloomy, blue sky is windy, but a light, bright blue sky indicates fine weather. Generally, the softer the clouds look, the less wind (but perhaps more rain) may be expected; and the harder, more "greasy," rolled, tufted, or ragged, the stronger the coming wind will prove. Also a bright yellow sky at sunset presages wind; a pale yellow, wet; and thus, by the prevalence of red, yellow, or grey tints, the coming weather may be foretold very nearly—indeed, if aided by instruments, almost exactly.

* A high dawn is when the first indications of daylight are seen above a bank of clouds. A low dawn is when the day breaks on or near the horizon, the first streaks of light being very low down.

Barometer Instructions.

Small inky-looking clouds foretell rain; light scud clouds driving across heavy masses show wind and rain, but if alone may indicate wind only.

High upper clouds crossing the sun, moon, or stars in a direction different from that of the lower clouds, or the wind then felt below, foretell a change of wind.

After fine, clear weather the first signs in the sky of a coming change are usually light streaks, curls, wisps, or mottled patches of white distant clouds, which increase, and are followed by an overcasting of murky vapour that grows into cloudiness. This appearance, more or less oily or watery as wind or rain will prevail, is an infallible sign.

Light, delicate, quiet tints or colours, with soft, undefined forms of clouds, indicate and accompany fine weather; but gaudy or unusual hues, with hard, definitely-outlined clouds, foretell rain, and probably strong wind.

When sea-birds fly out early and far to seaward, moderate wind and fair weather may be expected. When they hang about the land, or over it, sometimes flying inland, expect a strong wind, with stormy weather. As many creatures besides birds are affected by the approach of rain or wind, such indications should not be slighted by an observer who wishes to foresee weather.

Remarkable clearness of atmosphere near the horizon, distant objects such as hills unusually visible, or raised (by refraction),* and what is called a "good HEARING day," may be mentioned among signs of wet, if not wind, to be expected.

More than usual twinkling of the stars, indistinctness or apparent multiplication of the moon's horns, haloes, "wind-dogs" (fragments or pieces of rainbows, sometimes called "wind-galls") seen on detached clouds, and the rainbow, are more or less significant of increasing wind, if not approaching rain with or without wind.

Lastly, the dryness or dampness of the air, and its temperature (for the season), should ALWAYS be considered WITH OTHER indications of change or continuance of wind and weather.

On barometer scales the following contractions may be useful:—

RISE	FALL	
FOR	FOR	
N.E.LY	S.W.LY	
(N.W.-N.-E.)	(S.E.-S.-W.)	When the wind shifts against the sun, Trust it not, for back it will run.
DRY	WET	
OR	OR	
LESS	MORE	First rise after very low Indicates a stronger blow.
WIND.	WIND.	
—	—	
EXCEPT	EXCEPT	Long foretold—long last; Short notice—soon past.
WET FROM	WET FROM	
N.E.D.	N.E.D.	

* Much refraction is a sign of easterly wind.

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDED SEPTEMBER 30, 1914.

(From Official Sources.)

THE OBSERVATORY, GREENWICH, KENT.—HEIGHT OF STATION ABOVE SEA LEVEL, 159 FEET.

YEAR 1913-14.		BARO-METER.	AIR TEMPERATURE.					BRIGHT SUNSHINE.					RAIN AND OTHER FORMS OF PRECIPITATION.	
Month.	Mean corrected to 32° F. and Lat. 45° at Station Level.	Ins.	MEAN OF			Differ- ence from Average.	ABSOLUTE MAXIMUM AND MINIMUM.			Daily Mean.	Differ- ence from Average.	Per cent. of Poss.	Num- ber of Days.	Total Fall.
			A	B	Mini- mum.		Maxi- mum.	Day of Month.	Mini- mum.						Day of Month.
1913.	October	9.704	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Hrs.	Hrs.		15	3.58
	November	9.746	61.2	45.9	53.6	+3.5	67	36	23	3.57	+ 0.43	34	17	2.58
	December	9.931	54.2	42.0	48.1	+4.6	60	28	23	2.39	+ 0.72	27	9	0.88
			45.9	37.7	41.8	+1.8	55	28	31	0.90	- 0.18	11		
1914.	January	Mb.											16	0.50
	February	015.4	42.5	34.3	38.4	-0.2	55	20	24	0.67	- 0.56	8	16	2.46
	March	002.5	51.7	38.2	44.9	+5.4	59	29	27	3.79	+ 1.58	38	16	3.91
	April	997.4	51.0	37.4	44.2	+2.4	65	31	28	2.83	- 0.01	24	27	1.11
	May	013.4	61.1	40.0	50.5	+3.4	74	32	26	7.73	+ 2.40	56	11	1.63
	June	013.4	63.7	43.8	53.7	+0.7	83	22	27	6.74	+ 0.32	43	9	1.34
	July	011.5	71.5	49.2	60.4	0.0	88	30	8	8.90	+ 2.23	54	11	1.41
	August	006.3	74.5	53.9	64.2	+1.8	92	1	5	5.77	- 1.29	36	17	1.17
	September	011.5	74.4	53.6	64.0	+2.5	84	24	8	5.94	- 0.51	41	11	0.73
		013.0	68.9	47.6	58.3	+1.2	82	3	30	6.80	+ 1.57	54	9	

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDED SEPTEMBER 30, 1914.

(From Official Sources.)

THE OBSERVATORY, BIRMINGHAM, WARWICK.—HEIGHT OF STATION ABOVE SEA LEVEL, 542 FEET.

YEAR 1913-14.	Month.	BARO-METER.	Mean corrected to 32° F. and Lat. 45° at Station Level.	AIR TEMPERATURE.										BRIGHT SUNSHINE.			RAIN AND OTHER FORMS OF PRECIPITATION.	
				MEAN OF			Mean of A and B.	Difference from Average.	ABSOLUTE MAXIMUM AND MINIMUM.				Total Observed.	Difference from Average.	Per cent. of Poss.	Num-ber of Days.	Total Fall.	
				A	B	Mini-mum.			Maxi-mum.	Day of Month.	Mini-mum.	Day of Month.						
1913.				Ins.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Hrs.	Hrs.	23	17	Ins.	2-99	
October				9-273	56.6	46.6	51.6	+3.4	64	1	35	25	2-35	..	30	20	2-37	
November				9-288	51.8	41.5	46.7	+4.0	57	2, 27	31	23	2-61	..	8	10	1-20	
December				9-506	44.1	37.1	40.6	+1.9	52	9, 12	25	31	0-59	..				
1914.				Mb.														
January				000.8	41.5	34.2	37.9	+0.1	54	9	26	1, 24	0.98	..	12	10	0-89	
February				985.6	48.6	37.9	43.3	+4.4	56	3	32	17, 19	1.86	..	19	14	2.04	
March				982.8	47.8	37.2	42.5	+1.3	59	31	30	11	2-13	..	18	27	2-22	
April				999.0	59.1	41.4	50.3	+4.6	72	21, 22	35	8	6-93	..	50	10	1-08	
May				999.6	58.7	43.4	51.1	+0.4	71	22	34	2	4-61	..	30	16	1-52	
June				998.6	66.5	49.9	58.2	+0.8	83	30	40	8	6-83	..	41	13	2-81	
July				992.5	67.9	53.6	60.8	+0.4	79	11	46	4	4-39	..	27	23	3-82	
August				997.5	68.9	53.5	61.2	+1.6	79	14	48	8	5-32	..	37	12	2-12	
September				999.1	64.2	48.1	56.2	+0.7	77	2	38	21	5-17	..	41	12	0-94	

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDED SEPTEMBER 30, 1914.

(From Official Sources.)

THE OBSERVATORY, SOUTHAMPTON, HANTS.—HEIGHT OF STATION ABOVE SEA LEVEL, 84 FEET.

YEAR 1913-14.	BARO- METER.	AIR TEMPERATURE.						BRIGHT SUNSHINE.				RAIN AND OTHER FORMS OF PRECIPITATION.				
		Mean corrected to 32° F. and Lat. 45° at Station Level.	MEAN OF		Mean of A and B.	Differ- ence from Average.	ABSOLUTE MAXIMUM AND MINIMUM.			Daily Mean.	Differ- ence from Average.	Per cent of Poss.	Num- ber of Days.	Total Fall.		
			A	B			Maxi- mum.	Mini- mum.	Day of Month.						Mini- mum.	Day of Month.
Month.	Ins.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Hrs.	Hrs.	Hrs.	Hrs.	Ins.			
1913.	9-780	60.3	48.9	54.6	+3.7	65	3,12,25	40	24	2.66	- 0.95	25	19	4.26		
October	9-860	54.9	43.3	49.1	+4.2	60	11	29	23	2.60	+ 0.50	30	19	3.69		
November	0-056	46.9	38.5	42.7	+2.0	56	1	28	31	1.60	+ 0.08	21	12	1.91		
December																
1914.	Mb.															
January	019.2	42.8	34.0	38.4	-1.4	54	9	21	24	1.26	- 0.42	15	10	0.65		
February	005.3	50.5	39.9	45.2	+4.0	56	14	28	26	2.50	- 0.18	25	19	4.75		
March	002.1	50.7	38.8	44.8	+1.2	62	31	29	25	3.10	- 0.96	26	26	4.88		
April	016.8	60.6	42.7	51.7	+3.3	73	20, 21	34	8	7.73	+ 2.13	56	9	1.50		
May	017.1	62.7	45.8	54.3	+0.6	76	18, 19	35	26	6.55	- 0.51	43	14	1.37		
June	015.0	70.2	51.2	60.7	+1.0	81	29	41	8	8.63	+1.56	53	8	0.37		
July	009.9	69.2	54.8	62.0	-1.1	82	1	47	4	6.19	- 1.04	39	18	2.96		
August	014.7	71.2	55.3	63.3	+0.9	82	13, 14	50	11, 18	7.00	+ 0.29	49	13	2.78		
September	016.6	67.3	49.4	58.4	+0.1	79	4	36	30	7.30	+ 2.00	59	8	1.54		

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDED SEPTEMBER 30, 1914.

(From Official Sources.)

THE OBSERVATORY, YARMOUTH, NORFOLK.—HEIGHT OF STATION ABOVE SEA LEVEL, 27 FEET.

YEAR 1913-14.	BARO-METER.	AIR TEMPERATURE.				BRIGHT SUNSHINE.				RAIN AND OTHER FORMS OF PRECIPITATION.				
		Mean corrected to 32° F. and Lat. 45° at Station Level.	MEAN OF		Mean of A and B.	Differ-ence from Average.	ABSOLUTE MAXIMUM AND MINIMUM.		Daily Mean.	Differ-ence from Average.	Per cent of Poss.	Num-ber of Days.	Total Fall.	
			Maxi-mum.	B			Day of Month.	Maxi-mum.						Day of Month.
1913.	Ins.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Hrs.	Hrs.	Ins.			
October	9-863	58-9	48-6	53-8	+ 4-2	3	64	24, 25	31	13	3-56			
November	9-846	52-9	41-9	47-4	+ 3-7	2, 17	58	8	33	14	1-82			
December	0-015	45-1	35-9	40-5	+ 1-9	3, 8, 9	53	26, 29	20	13	0-81			
1914.	Mb.													
January	019-7	41-7	33-3	37-5	- 0-1	30	53	25	17	13	2-35			
February	006-9	49-5	37-5	43-5	+ 5-2	14	58	18, 19, 26	40	11	1-22			
March	001-5	49-7	35-8	42-8	+ 2-3	31	65	12	34	21	3-74			
April	018-3	56-0	41-0	48-5	+ 3-7	1	66	8, 9	55	9	0-76			
May	018-4	57-6	45-6	51-6	+ 1-6	21	69	28, 29	50	15	1-52			
June	016-6	62-5	51-3	56-9	+ 0-3	30	74	8	49	8	1-37			
July	010-9	63-0	56-1	62-1	+ 1-4	22	48	31	43	13	2-12			
August	016-6	69-7	53-9	61-8	+ 1-3	9	77	8	48	8	0-75			
September	017-0	64-2	48-7	56-5	- 0-4	14	72	20	50	9	1-61			

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDED SEPTEMBER 30, 1914.

(From Official Sources.)

THE OBSERVATORY, YORK, YORKSHIRE.—HEIGHT OF STATION ABOVE SEA LEVEL, 53 FEET.

YEAR 1913-14.	Month.	BARO- METER.	AIR TEMPERATURE.					ABSOLUTE MAXIMUM AND MINIMUM.				BRIGHT SUNSHINE.		RAIN AND OTHER FORMS OF PRECIPITATION.	
			MEAN OF		Mean of A and B.	Differ- ence from Average.	Maxi- mum.	Day of Month.	Mini- mum.	Day of Month.	Daily Mean.	Differ- ence from Average.	Per cent. of Poss.	Num- ber of Days.	Total Fall.
			A	B											
1913.	October	Ins. 9-814	Deg. 57-4	Deg. 45-2	Deg. 51-3	Deg. +3-3	Deg. 63	1,17,20	Deg. 31	24	Hrs. 2-49	Hrs. -0-22	24	15	Ins. 2-36
	November	9-754	52-0	41-8	46-9	+4-3	58	17	31	9, 23	1-22	-0-08	15	22	2-09
	December	9-980	45-2	36-2	40-7	+2-5	55	9	19	6	0-59	-0-22	8	11	1-33
	1914.	Mb.													
January		018-4	43-9	33-8	38-9	+1-2	55	30, 31	15	1	0-70	-0-27	9	15	1-59
February		001-8	50-4	39-0	44-7	+5-7	58	1	32	25	2-07	+0-03	22	12	1-28
March		999-2	49-1	37-0	43-1	+1-7	60	30	29	10, 11	2-87	+0-43	25	20	1-81
April		016-2	60-3	40-7	50-5	+4-6	74	21	34	16	6-73	+2-20	48	8	0-53
May		016-9	59-8	42-8	51-3	+0-3	75	18	32	2, 26	4-23	-1-51	27	13	1-41
June		016-3	67-8	49-1	58-5	+2-0	82	30	39	3, 8	7-57	+1-70	45	18	1-98
July		009-4	69-3	54-0	61-7	+1-0	83	21	49	23, 26	4-61	-1-13	28	16	5-42
August		014-8	70-3	52-5	61-4	+1-7	78	14	45	12	5-16	+0-29	35	13	1-28
September		015-9	65-2	47-3	56-3	+0-8	79	3	34	30	5-80	+1-80	46	5	1-10

MONTHLY METEOROLOGICAL TABLE FOR THE YEAR ENDED SEPTEMBER 30, 1914.

(From Official Sources.)

THE OBSERVATORY, MANCHESTER, LANCASHIRE.—HEIGHT OF STATION ABOVE SEA LEVEL, 195 FEET.

YEAR 1913-14.	Month.	BARO-METER.	AIR TEMPERATURE.										BRIGHT SUNSHINE.			RAIN AND OTHER FORMS OF PRECIPITATION.	
			Mean corrected to 32° F. Lat. 45° at Station Level.	MEAN OF			Mean of A and B.	Difference from Average.	ABSOLUTE MAXIMUM AND MINIMUM.				Daily Mean.	Difference from Average.	Per cent. of Poss.	Number of Days.	Total Fall.
				A	B	Mini-mum.			Maxi-mum.	Day of Month.	Mini-mum.	Day of Month.					
1913.	October	Ins. 9·644	Deg. 57·5	48·4	Deg. 53·0	..	Deg. 65	1, 19	Deg. 34	25	Hrs. 2·20	21	13	Ins. 1·53			
	November	9·621	52·1	43·9	48·0	..	57	10	37	23	0·68	8	27	3·86			
	December	9·857	45·6	39·2	42·4	..	53	9	27	31	0·11	2	17	2·34			
	January	Mb. 013·1	43·5	37·0	40·3	..	54	31	28	1	0·30	4	17	2·45			
1914.	February	996·1	49·5	40·8	45·2	..	56	1	34	25	1·25	13	15	2·30			
	March	994·3	48·3	38·9	43·6	..	59	30	32	10	1·84	16	27	4·56			
	April	011·0	58·9	43·3	51·1	..	75	21	35	15	5·43	39	10	1·25			
	May	012·0	57·9	45·3	51·6	..	71	17	35	2	3·26	21	15	2·32			
	June	011·3	67·2	51·7	59·5	..	82	30	41	8	5·87	35	11	1·91			
	July	004·5	68·5	55·9	62·2	..	85	21	48	4	3·55	22	19	3·95			
	August	009·3	69·4	55·3	62·4	..	85	14	50	12, 28	4·39	30	15	3·13			
	September	011·1	64·0	50·3	57·2	..	77	3	39	21	5·33	43	12	2·87			

RAINFALL AT THE CENTRES NAMED

FROM 1901 TO 1913.

Year.	TRURO.		GREENWICH.		CAMBRIDGE.		LIVERPOOL.		HALIFAX.		CARLISLE.		MANCHESTER.	
	Days it fell.	Inches.	Days it fell.	Inches.	Days it fell.	Inches.	Days it fell.	Inches.	Days it fell.	Inches.	Days it fell.	Inches.	Days it fell.	Inches.
1901.....	199	35.40	123	20.28	126	16.24	190	24.71	192	30.90	187	29.20	172	29.54
1902.....	188	36.10	159	19.34	139	15.76	200	25.77	186	27.72	216	25.52	192	26.51
1903.....	230	52.11	179	35.54	169	30.54	224	34.43	..	57.65	236	47.24	194	37.81
1904.....	203	44.59	153	20.66	165	17.57	220	30.94	..	41.82	218	28.16	207	25.10
1905.....	188	34.08	178	23.02	180	18.99	187	25.24	187	25.94	182	24.98	225	30.98
1906.....	197	39.31	161	24.74	171	22.32	197	31.20	207	33.84	209	30.00	240	32.20
1907.....	209	42.24	143	24.17	210	23.68	187	29.51	..	42.45	211	36.49	192	30.07
1908.....	182	34.04	163	23.42	191	18.12	180	31.79	184	30.65	201	33.30	185	28.23
1909.....	176	35.98	194	24.98	179	23.06	194	34.84	199	35.69	190	35.28	186	35.55
1910.....	245	52.94	203	27.27	220	21.95	223	37.40	216	45.92	232	36.37	212	36.64
1911.....	185	43.02	152	23.31	157	19.04	169	30.80	196	29.01	181	30.54	173	28.38
1912.....	220	50.41	176	24.62	182	27.29	215	32.52	208	44.04	216	31.69	217	38.39
1913.....	201	42.22	163	21.59	164	20.58	203	30.14	195	37.44	190	28.25	199	28.65

DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1915.

JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.			
Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.	
		Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.
1	S	h m	h m	1	M	h m	h m	1	Th	h m	h m	1	Th	h m	h m	1	S	h m	h m	1	Th	h m	h m
2	S	11 36	0 16	2	Th	11 52	0 16	2	W	11 52	0 16	2	F	11 52	0 16	2	S	11 52	0 16	2	W	11 52	0 16
3	S	11 55	0 36	3	W	11 52	0 36	3	Th	11 52	0 36	3	S	11 52	0 36	3	Th	11 52	0 36	3	Th	11 52	0 36
4	S	11 55	0 53	4	Th	11 52	0 53	4	W	11 52	0 53	4	Th	11 52	0 53	4	S	11 52	0 53	4	Th	11 52	0 53
5	S	11 55	1 11	5	F	11 52	1 11	5	Th	11 52	1 11	5	W	11 52	1 11	5	Th	11 52	1 11	5	Th	11 52	1 11
6	S	11 55	1 31	6	S	11 52	1 31	6	Th	11 52	1 31	6	Th	11 52	1 31	6	S	11 52	1 31	6	Th	11 52	1 31
7	S	11 55	1 50	7	Th	11 52	1 50	7	W	11 52	1 50	7	Th	11 52	1 50	7	Th	11 52	1 50	7	Th	11 52	1 50
8	S	11 55	2 07	8	F	11 52	2 07	8	Th	11 52	2 07	8	Th	11 52	2 07	8	S	11 52	2 07	8	Th	11 52	2 07
9	S	11 55	2 27	9	S	11 52	2 27	9	Th	11 52	2 27	9	W	11 52	2 27	9	Th	11 52	2 27	9	Th	11 52	2 27
10	S	11 55	2 47	10	Th	11 52	2 47	10	Th	11 52	2 47	10	Th	11 52	2 47	10	S	11 52	2 47	10	Th	11 52	2 47
11	S	11 55	3 09	11	W	11 52	3 09	11	Th	11 52	3 09	11	Th	11 52	3 09	11	Th	11 52	3 09	11	Th	11 52	3 09
12	S	11 55	3 31	12	Th	11 52	3 31	12	W	11 52	3 31	12	Th	11 52	3 31	12	S	11 52	3 31	12	Th	11 52	3 31
13	S	11 55	3 59	13	F	11 52	3 59	13	Th	11 52	3 59	13	Th	11 52	3 59	13	Th	11 52	3 59	13	Th	11 52	3 59
14	S	11 55	4 27	14	S	11 52	4 27	14	Th	11 52	4 27	14	W	11 52	4 27	14	Th	11 52	4 27	14	Th	11 52	4 27
15	S	11 55	4 58	15	Th	11 52	4 58	15	Th	11 52	4 58	15	Th	11 52	4 58	15	S	11 52	4 58	15	Th	11 52	4 58
16	S	11 55	5 31	16	W	11 52	5 31	16	Th	11 52	5 31	16	Th	11 52	5 31	16	Th	11 52	5 31	16	Th	11 52	5 31
17	S	11 55	6 05	17	Th	11 52	6 05	17	Th	11 52	6 05	17	Th	11 52	6 05	17	S	11 52	6 05	17	Th	11 52	6 05
18	S	11 55	6 40	18	F	11 52	6 40	18	Th	11 52	6 40	18	Th	11 52	6 40	18	Th	11 52	6 40	18	Th	11 52	6 40
19	S	11 55	7 16	19	S	11 52	7 16	19	Th	11 52	7 16	19	Th	11 52	7 16	19	Th	11 52	7 16	19	Th	11 52	7 16
20	S	11 55	7 52	20	Th	11 52	7 52	20	Th	11 52	7 52	20	Th	11 52	7 52	20	S	11 52	7 52	20	Th	11 52	7 52
21	S	11 55	8 28	21	F	11 52	8 28	21	Th	11 52	8 28	21	Th	11 52	8 28	21	Th	11 52	8 28	21	Th	11 52	8 28
22	S	11 55	9 04	22	S	11 52	9 04	22	Th	11 52	9 04	22	Th	11 52	9 04	22	Th	11 52	9 04	22	Th	11 52	9 04
23	S	11 55	9 38	23	Th	11 52	9 38	23	Th	11 52	9 38	23	Th	11 52	9 38	23	S	11 52	9 38	23	Th	11 52	9 38
24	S	11 55	10 12	24	W	11 52	10 12	24	Th	11 52	10 12	24	Th	11 52	10 12	24	Th	11 52	10 12	24	Th	11 52	10 12
25	S	11 55	10 44	25	Th	11 52	10 44	25	Th	11 52	10 44	25	Th	11 52	10 44	25	S	11 52	10 44	25	Th	11 52	10 44
26	S	11 55	11 17	26	F	11 52	11 17	26	Th	11 52	11 17	26	Th	11 52	11 17	26	Th	11 52	11 17	26	Th	11 52	11 17
27	S	11 55	11 51	27	S	11 52	11 51	27	Th	11 52	11 51	27	Th	11 52	11 51	27	Th	11 52	11 51	27	Th	11 52	11 51
28	S	11 55	12 24	28	Th	11 52	12 24	28	Th	11 52	12 24	28	Th	11 52	12 24	28	S	11 52	12 24	28	Th	11 52	12 24
29	S	11 55	1 00	29	F	11 52	1 00	29	Th	11 52	1 00	29	Th	11 52	1 00	29	Th	11 52	1 00	29	Th	11 52	1 00
30	S	11 55	1 31	30	S	11 52	1 31	30	Th	11 52	1 31	30	Th	11 52	1 31	30	Th	11 52	1 31	30	Th	11 52	1 31
31	S	11 55	2 02	31	Th	11 52	2 02	31	Th	11 52	2 02	31	Th	11 52	2 02	31	S	11 52	2 02	31	Th	11 52	2 02

Clarston tides 7 minutes later than Liverpool each day.

DAILY TIDE TABLES AT LIVERPOOL FOR THE YEAR 1915—continued.

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.			
Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.		Date.	Day.	LIVERPOOL High Water.	
		Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.			Morn.	Aftern.
1	Th	2 0	2 22	1	W	3 24	3 48	1	F	3 82	4 4	1	2	5 25	6 5	1	W	5 49	6 23	1	W	5 49	6 23
2	F	3 7	3 7	2	Th	4 16	4 47	2	Th	4 40	5 21	2	3	6 44	7 20	2	Th	6 56	7 25	2	Th	6 56	7 25
3	S	3 30	3 54	3	F	5 21	5 50	3	S	5 33	6 11	3	4	7 33	8 11	3	F	7 55	8 22	3	F	7 55	8 22
4	M	4 20	4 48	4	S	6 45	7 31	4	S	7 33	8 11	4	5	8 48	9 28	4	S	8 48	9 12	4	S	8 48	9 12
5	M	5 17	5 46	5	W	8 13	8 50	5	W	8 43	9 11	5	6	9 28	10 6	5	W	9 35	9 58	5	S	9 35	9 58
6	Th	6 15	6 45	6	Th	9 22	10 24	6	Th	9 33	10 24	6	7	10 45	11 5	6	M	10 21	10 45	6	M	10 21	10 45
7	F	7 16	7 47	7	Th	10 6	10 41	7	Th	10 40	10 57	7	8	10 45	11 5	7	Th	11 10	11 36	7	Th	11 10	11 36
8	Th	8 18	8 49	8	F	11 14	11 30	8	F	11 15	11 34	8	9	11 26	11 49	8	W			8	W		
9	F	9 18	9 43	9	W	11 47		9	W	11 53		9	10	0 87	1 2	9	Th	0 30	0 56	9	Th	0 30	0 56
10	S	10 45	11 5	10	Th	0 4	0 32	10	Th	0 13	0 53	10	11	0 87	1 2	10	F	1 22	1 47	10	F	1 22	1 47
11	M	11 24	11 43	11	F	0 4	0 41	11	F	0 13	0 53	11	12	1 26	2 15	11	S	2 12	2 38	11	S	2 12	2 38
12	M			12	S	1 18	1 54	12	S	1 34	2 19	12	13	2 15	2 42	12	S	2 12	2 38	12	S	2 12	2 38
13	Th			13	Th	2 33	2 58	13	Th	2 19	2 45	13	14	3 13	3 48	13	Th	3 5	4 4	13	Th	3 5	4 4
14	Th			14	Th	3 23	3 48	14	Th	3 19	3 45	14	15	4 26	5 7	14	Th	5 8	6 45	14	Th	5 8	6 45
15	F			15	Th	4 34	5 18	15	F	4 34	5 20	15	16	5 48	6 20	15	W	6 13	6 45	15	W	6 13	6 45
16	F			16	F	5 18	5 54	16	F	5 18	5 54	16	17	7 2	7 35	16	W	7 15	7 44	16	W	7 15	7 44
17	S			17	S	6 5	6 54	17	S	6 8	6 54	17	18	8 53	9 20	17	Th	8 14	8 43	17	Th	8 14	8 43
18	S			18	S	7 41	8 23	18	S	7 36	8 11	18	19	9 41	10 0	18	F	9 10	9 34	18	F	9 10	9 34
19	M			19	Th	8 59	9 28	19	Th	8 42	9 11	19	20	10 17	10 34	19	S	9 56	10 15	19	S	9 56	10 15
20	M			20	Th	9 52	10 22	20	Th	9 30	10 6	20	21	10 17	10 34	20	M	10 35	10 54	20	M	10 35	10 54
21	W			21	M	10 32	10 55	21	M	10 6	10 34	21	22	10 51	11 8	21	Th	11 13	11 32	21	Th	11 13	11 32
22	W			22	W	10 32	10 55	22	W	10 6	10 34	22	23	11 26	11 45	22	F	11 50		22	F	11 50	
23	Th			23	Th	11 7	11 25	23	Th	10 41	11 53	23	24	11 26	11 45	23	W	0 8	0 27	23	W	0 8	0 27
24	Th			24	F	11 43	11 43	24	F	11 50	11 53	24	25	0 92	0 9	24	Th	0 46	1 4	24	Th	0 46	1 4
25	F			25	S	0 1	0 18	25	S	0 7	0 24	25	26	0 92	0 9	25	F	1 21	1 87	25	F	1 21	1 87
26	F			26	S	0 35	0 52	26	S	0 41	0 57	26	27	0 92	0 9	26	S	1 53	2 10	26	S	1 53	2 10
27	M			27	S	1 8	1 23	27	M	1 13	1 28	27	28	2 5	2 25	27	M	2 27	2 46	27	M	2 27	2 46
28	M			28	Th	1 38	1 53	28	Th	1 43	1 58	28	29	2 5	2 25	28	Th	3 8	3 32	28	Th	3 8	3 32
29	Th			29	Th	2 8	2 25	29	F	2 17	2 39	29	30	3 38	4 1	29	M	3 58	4 25	29	M	3 58	4 25
30	Th			30	W	2 44	3 6	30	S	3 4	4 45	30	31	4 41	5 15	30	W	4 55	5 25	30	W	4 55	5 25
31	S			31	W			31	S			31				31	F	5 57	6 29	31	F	5 57	6 29

Garston tides 7 minutes later than Liverpool each day.

DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1915.

JANUARY.				FEBRUARY.				MARCH.				APRIL.				MAY.				JUNE.			
GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE		GOOLE	
High Water.		High Water.		High Water.		High Water.		High Water.		High Water.		High Water.		High Water.		High Water.		High Water.		High Water.		High Water.	
Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.	Morn.	Aftern.
Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.	Day.	Date.
1	F	1	M	1	M	1	M	1	M	1	M	1	M	1	M	1	M	1	M	1	M	1	M
2	S	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu	2	Tu
3	S	3	W	3	W	3	W	3	W	3	W	3	W	3	W	3	W	3	W	3	W	3	W
4	S	4	Th	4	Th	4	Th	4	Th	4	Th	4	Th	4	Th	4	Th	4	Th	4	Th	4	Th
5	Th	5	F	5	F	5	F	5	F	5	F	5	F	5	F	5	F	5	F	5	F	5	F
6	S	6	S	6	S	6	S	6	S	6	S	6	S	6	S	6	S	6	S	6	S	6	S
7	Th	7	M	7	M	7	M	7	M	7	M	7	M	7	M	7	M	7	M	7	M	7	M
8	F	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu	8	Tu
9	S	9	W	9	W	9	W	9	W	9	W	9	W	9	W	9	W	9	W	9	W	9	W
10	S	10	Th	10	Th	10	Th	10	Th	10	Th	10	Th	10	Th	10	Th	10	Th	10	Th	10	Th
11	F	11	F	11	F	11	F	11	F	11	F	11	F	11	F	11	F	11	F	11	F	11	F
12	S	12	S	12	S	12	S	12	S	12	S	12	S	12	S	12	S	12	S	12	S	12	S
13	Th	13	W	13	W	13	W	13	W	13	W	13	W	13	W	13	W	13	W	13	W	13	W
14	Th	14	Th	14	Th	14	Th	14	Th	14	Th	14	Th	14	Th	14	Th	14	Th	14	Th	14	Th
15	F	15	M	15	M	15	M	15	M	15	M	15	M	15	M	15	M	15	M	15	M	15	M
16	S	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu	16	Tu
17	S	17	W	17	W	17	W	17	W	17	W	17	W	17	W	17	W	17	W	17	W	17	W
18	Th	18	Th	18	Th	18	Th	18	Th	18	Th	18	Th	18	Th	18	Th	18	Th	18	Th	18	Th
19	Th	19	F	19	F	19	F	19	F	19	F	19	F	19	F	19	F	19	F	19	F	19	F
20	W	20	S	20	S	20	S	20	S	20	S	20	S	20	S	20	S	20	S	20	S	20	S
21	W	21	S	21	S	21	S	21	S	21	S	21	S	21	S	21	S	21	S	21	S	21	S
22	Th	22	M	22	M	22	M	22	M	22	M	22	M	22	M	22	M	22	M	22	M	22	M
23	Th	23	W	23	W	23	W	23	W	23	W	23	W	23	W	23	W	23	W	23	W	23	W
24	Th	24	W	24	W	24	W	24	W	24	W	24	W	24	W	24	W	24	W	24	W	24	W
25	Th	25	Th	25	Th	25	Th	25	Th	25	Th	25	Th	25	Th	25	Th	25	Th	25	Th	25	Th
26	Th	26	F	26	F	26	F	26	F	26	F	26	F	26	F	26	F	26	F	26	F	26	F
27	Th	27	S	27	S	27	S	27	S	27	S	27	S	27	S	27	S	27	S	27	S	27	S
28	Th	28	Th	28	Th	28	Th	28	Th	28	Th	28	Th	28	Th	28	Th	28	Th	28	Th	28	Th
29	Th	29	W	29	W	29	W	29	W	29	W	29	W	29	W	29	W	29	W	29	W	29	W
30	Th	30	F	30	F	30	F	30	F	30	F	30	F	30	F	30	F	30	F	30	F	30	F
31	Th	31	S	31	S	31	S	31	S	31	S	31	S	31	S	31	S	31	S	31	S	31	S

Hull tides 59 minutes earlier than Goole each day.

DAILY TIDE TABLES AT GOOLE FOR THE YEAR 1915—continued.

JULY.				AUGUST.				SEPTEMBER.				OCTOBER.				NOVEMBER.				DECEMBER.			
GOOLE High Water.				GOOLE High Water.				GOOLE High Water.				GOOLE High Water.				GOOLE High Water.				GOOLE High Water.			
Date.	Day.	Morn.	Aftern.	Date.	Day.	Morn.	Aftern.	Date.	Day.	Morn.	Aftern.	Date.	Day.	Morn.	Aftern.	Date.	Day.	Morn.	Aftern.	Date.	Day.	Morn.	Aftern.
1	Th	10 4	10 54	1	Th	11 35	0 84	1	Th	11 38	1 20	1	Th	0 57	2 14	1	Th	1 21	2 36	1	Th	1 21	2 36
2	F	10 48	11 38	2	F	10 3	0 84	2	F	10 19	1 20	2	F	0 57	2 14	2	F	1 21	2 36	2	F	1 21	2 36
3	S	11 33	11 38	3	S	1 6	1 84	3	S	1 46	2 26	3	S	0 57	2 14	3	S	1 21	2 36	3	S	1 21	2 36
4	M	0 22	0 28	4	M	2 36	3 86	4	M	2 31	3 26	4	M	0 57	2 14	4	M	1 21	2 36	4	M	1 21	2 36
5	M	1 14	2 31	5	M	3 30	4 46	5	M	3 21	4 31	5	M	0 57	2 14	5	M	1 21	2 36	5	M	1 21	2 36
6	W	2 14	3 31	6	W	4 46	5 22	6	W	4 11	5 55	6	W	0 57	2 14	6	W	1 21	2 36	6	W	1 21	2 36
7	Th	3 20	4 45	7	Th	5 43	6 14	7	Th	5 51	6 84	7	Th	0 57	2 14	7	Th	1 21	2 36	7	Th	1 21	2 36
8	F	4 24	5 40	8	F	6 23	6 56	8	F	6 26	7 9	8	F	0 57	2 14	8	F	1 21	2 36	8	F	1 21	2 36
9	S	5 29	6 40	9	S	7 0	7 34	9	S	7 7	7 42	9	S	0 57	2 14	9	S	1 21	2 36	9	S	1 21	2 36
10	S	6 40	7 51	10	S	8 10	8 45	10	S	8 10	8 46	10	S	0 57	2 14	10	S	1 21	2 36	10	S	1 21	2 36
11	Th	7 51	8 30	11	Th	9 19	9 53	11	Th	9 24	9 58	11	Th	0 57	2 14	11	Th	1 21	2 36	11	Th	1 21	2 36
12	Th	8 24	9 4	12	Th	9 46	10 27	12	Th	9 51	10 32	12	Th	0 57	2 14	12	Th	1 21	2 36	12	Th	1 21	2 36
13	W	8 58	10 21	13	W	10 25	11 3	13	W	10 51	11 18	13	W	0 57	2 14	13	W	1 21	2 36	13	W	1 21	2 36
14	W	9 24	10 47	14	W	10 51	11 3	14	W	10 51	11 18	14	W	0 57	2 14	14	W	1 21	2 36	14	W	1 21	2 36
15	Th	9 58	10 58	15	Th	11 3	11 43	15	Th	11 47	1 10	15	Th	0 57	2 14	15	Th	1 21	2 36	15	Th	1 21	2 36
16	Th	10 21	11 38	16	Th	11 3	11 43	16	Th	11 47	1 10	16	Th	0 57	2 14	16	Th	1 21	2 36	16	Th	1 21	2 36
17	S	10 58	11 38	17	S	11 3	11 43	17	S	11 47	1 10	17	S	0 57	2 14	17	S	1 21	2 36	17	S	1 21	2 36
18	S	11 38	12 1	18	S	11 3	11 43	18	S	11 47	1 10	18	S	0 57	2 14	18	S	1 21	2 36	18	S	1 21	2 36
19	M	10 47	11 38	19	M	11 38	1 13	19	M	11 38	1 13	19	M	0 57	2 14	19	M	1 21	2 36	19	M	1 21	2 36
20	M	0 23	0 26	20	M	12 2	2 51	20	M	12 2	2 51	20	M	0 57	2 14	20	M	1 21	2 36	20	M	1 21	2 36
21	W	0 23	0 26	21	W	12 2	2 51	21	W	12 2	2 51	21	W	0 57	2 14	21	W	1 21	2 36	21	W	1 21	2 36
22	W	0 23	0 26	22	W	12 2	2 51	22	W	12 2	2 51	22	W	0 57	2 14	22	W	1 21	2 36	22	W	1 21	2 36
23	Th	0 23	0 26	23	Th	12 2	2 51	23	Th	12 2	2 51	23	Th	0 57	2 14	23	Th	1 21	2 36	23	Th	1 21	2 36
24	Th	0 23	0 26	24	Th	12 2	2 51	24	Th	12 2	2 51	24	Th	0 57	2 14	24	Th	1 21	2 36	24	Th	1 21	2 36
25	S	0 23	0 26	25	S	12 2	2 51	25	S	12 2	2 51	25	S	0 57	2 14	25	S	1 21	2 36	25	S	1 21	2 36
26	S	0 23	0 26	26	S	12 2	2 51	26	S	12 2	2 51	26	S	0 57	2 14	26	S	1 21	2 36	26	S	1 21	2 36
27	Th	0 23	0 26	27	Th	12 2	2 51	27	Th	12 2	2 51	27	Th	0 57	2 14	27	Th	1 21	2 36	27	Th	1 21	2 36
28	Th	0 23	0 26	28	Th	12 2	2 51	28	Th	12 2	2 51	28	Th	0 57	2 14	28	Th	1 21	2 36	28	Th	1 21	2 36
29	W	0 23	0 26	29	W	12 2	2 51	29	W	12 2	2 51	29	W	0 57	2 14	29	W	1 21	2 36	29	W	1 21	2 36
30	W	0 23	0 26	30	W	12 2	2 51	30	W	12 2	2 51	30	W	0 57	2 14	30	W	1 21	2 36	30	W	1 21	2 36
31	S	0 23	0 26	31	S	12 2	2 51	31	S	12 2	2 51	31	S	0 57	2 14	31	S	1 21	2 36	31	S	1 21	2 36

Hull tides 59 minutes earlier than Goole each day.

TERMS AND ABBREVIATIONS COMMONLY USED IN BUSINESS.

A/c	Account.	D/S	Days after sight.
C	Currency.	%	Per cent.
\$	A dollar.	@ ₧ lb	At per pound.
E. E.	Errors excepted.	B/L	Bill of lading.
E. & O. E. ..	Errors and omissions excepted.	AD VALOREM ..	According to value.
F. O. B.	Free on board (delivered on deck without expense to the ship).	AFFIDAVIT	Statement on oath.
F. P. A.	Free of particular average.	AFFIRMATION ..	Statement without an oath.
INST.	Present month.	AGIO	The premium borne by a better sort of money above an inferior.
PROX.	Next month.	ASSETS	A term for property in contradistinction to liabilities.
ULT.	Last month.	BANCO	A continental term for bank money at Hamburg and other places.
D/D	Days after date.		
M/D	Months after date.		

DEAD FREIGHT.—The damage payable by one who engages to load a ship fully, and fails to do so.

DEVIATION, in marine insurance, is that divergence from the voyage insured which releases the underwriter from his risk.

DISCOUNT.—An allowance made for payment of money before due.

POLICY.—The document containing the contract of insurance. A *Valued Policy* is when the interest insured is valued. An *Open Policy* is one in which the amount is left for subsequent proof. In an open policy where the value shipped does not equal the value insured, the difference is termed *over insurance*; and the proportionable amount of premium returnable to the insurer is called a *return for short interest*.

PRIMAGE.—A small allowance for the shipmaster's care of goods, now generally included in the freight.

PRO RATA.—Payment in proportion to the various interests concerned.

QUID PRO QUO.—Giving one thing for another.

RESPONDENTIA.—A contract of loan by which goods in a ship are hypothecated to the lender, as in bottomry.

ULLAGE.—The quantity a cask wants of being full.

PRINCIPAL ARTICLES OF THE CALENDAR,

FOR THE YEAR 1915.

Golden Number.....	16	Dominical Letter....	C
Solar Cycle	20	Roman Indiction	13
Epact	14		

Year 6628 of the Julian Period.

„ 1919 from the Birth of Christ.

„ 2668 „ „ Foundation of Rome according to Varron.

„ 7423 of the World (Constantinopolitan account).

„ 7407 „ „ (Alexandrian account).

„ 5676 of the Jewish Era commences on September 9th, 1915.

„ 1334 of the Mahommedan Era commences on November 9th, 1915.

Ramadân (Month of Abstinence observed by the Turks) commences on July 13th, 1915.

FIXED AND MOVABLE FESTIVALS, ANNIVERSARIES, ETC.

Epiphany	Jan. 6	Ascension Day	May 13
Septuagesima Sunday	„ 31	Pentecost—Whit Sunday....	„ 23
Quinquagesima Sunday ...	Feb. 14	Trinity Sunday	„ 30
Ash Wednesday.....	„ 17	George V. born (1865)	June 3
First Sunday in Lent	„ 21	St. John Baptist—Midsummer	
St. Patrick	Mar. 17	Day	„ 24
Lady Day	„ 25	St. Michael—Michaelmas Day	Sept. 29
Palm Sunday.....	„ 28	St. Andrew	Nov. 30
Good Friday	April 2	Christmas Day (Saturday) ..	Dec. 25
Easter Sunday	„ 4		

THE FOUR QUARTERS OF THE YEAR.

		H. M.
Spring Quarter begins	March 21st	4 51 afternoon.
Summer „ „	June 22nd	0 29 afternoon.
Autumn „ „	September 24th	1 23 morning.
Winter „ „	December 22nd	10 16 afternoon.

REGISTERS OF BIRTHS, MARRIAGES, AND DEATHS.

These are now kept at Somerset House, and may be searched on payment of the fee of one shilling. If a certified copy of any entry be required, the charge for that, in addition to the shilling for the search, is two shillings and sevenpence, which includes a penny for stamp duty. The registers contain an entry of births, deaths, and marriages since 1st July, 1837.

BANK HOLIDAYS, 1915.

ENGLAND.

Easter Monday	April	5
Whit Monday.....	May	24
First Monday in August.....	August	2
Boxing Day (Monday).....	December	27

SCOTLAND.

New Year	January	1
Good Friday	April	2
First Monday in May	May	3
First Monday in August.....	August	2
Boxing Day	December	27

LAW SITTINGS, 1915.

	Begin		End
Hilary Sittings.....	January 11	.....	March 31
Easter " 	April 13	.....	May 21
Trinity " 	June 1	.....	July 31
Michael. " 	October 11	.....	December 21

ECLIPSES, 1915.

An Annular Eclipse of the Sun on Sunday, February 11th, invisible throughout the British Isles.

An Annular Eclipse of the Sun on Tuesday and Wednesday, August 10th and 11th, invisible throughout the British Isles.

There are no Eclipses of the Moon proper, but the Moon enters the penumbra of the Earth, when, if the Moon is above the horizon, a darkening of the Moon's surface will be observed. The times of these entries are about:—

January 31st at 5h. a.m.	}	Greenwich mean time.
March 1st at 7h. p.m.		
July 26th at 0h p.m.		
August 24th at 10h. p.m.		

CALENDAR FOR 1915.

January.					February.					March.				
\$	...	3	10	17 24 31	\$	...	7	14	21 28	\$	...	7	14	21 28
M	...	4	11	18 25 ...	M	...	1	8	15 22 ...	M	...	1	8	15 22 29
Th	...	5	12	19 26 ...	Th	...	2	9	16 23 ...	Th	...	2	9	16 23 30
W	...	6	13	20 27 ...	W	...	3	10	17 24 ...	W	...	3	10	17 24 31
Th	...	7	14	21 28 ...	Th	...	4	11	18 25 ...	Th	...	4	11	18 25 ...
F	...	1	8	15 22 29 ...	F	...	5	12	19 26 ...	F	...	5	12	19 26 ...
S	...	2	9	16 23 30 ...	S	...	6	13	20 27 ...	S	...	6	13	20 27 ...
April.					May.					June.				
\$	...	4	11	18 25	\$	...	2	9	16 23 30	\$	...	6	13	20 27
M	...	5	12	19 26	M	...	3	10	17 24 31	M	...	7	14	21 28
Th	...	6	13	20 27	Th	...	4	11	18 25 ...	Th	...	1	8	15 22 29
W	...	7	14	21 28	W	...	5	12	19 26 ...	W	...	2	9	16 23 30
Th	...	1	8	15 22 29	Th	...	6	13	20 27 ...	Th	...	3	10	17 24 ...
F	...	2	9	16 23 30	F	...	7	14	21 28 ...	F	...	4	11	18 25 ...
S	...	3	10	17 24 ...	S	...	1	8	15 22 29 ...	S	...	5	12	19 26 ...
July.					August.					September.				
\$	...	4	11	18 25	\$	...	1	8	15 22 29	\$	...	5	12	19 26
M	...	5	12	19 26	M	...	2	9	16 23 30	M	...	6	13	20 27
Th	...	6	13	20 27	Th	...	3	10	17 24 31	Th	...	7	14	21 28
W	...	7	14	21 28	W	...	4	11	18 25 ...	W	...	1	8	15 22 29
Th	...	1	8	15 22 29	Th	...	5	12	19 26 ...	Th	...	2	9	16 23 30
F	...	2	9	16 23 30	F	...	6	13	20 27 ...	F	...	3	10	17 24 ...
S	...	3	10	17 24 31	S	...	7	14	21 28 ...	S	...	4	11	18 25 ...
October.					November.					December.				
\$	...	3	10	17 24 31	\$	...	7	14	21 28	\$	...	5	12	19 26
M	...	4	11	18 25 ...	M	...	1	8	15 22 29	M	...	6	13	20 27
Th	...	5	12	19 26 ...	Th	...	2	9	16 23 30	Th	...	7	14	21 28
W	...	6	13	20 27 ...	W	...	3	10	17 24 ...	W	...	1	8	15 22 29
Th	...	7	14	21 28 ...	Th	...	4	11	18 25 ...	Th	...	2	9	16 23 30
F	...	1	8	15 22 29 ...	F	...	5	12	19 26 ...	F	...	3	10	17 24 31
S	...	2	9	16 23 30 ...	S	...	6	13	20 27 ...	S	...	4	11	18 25 ...

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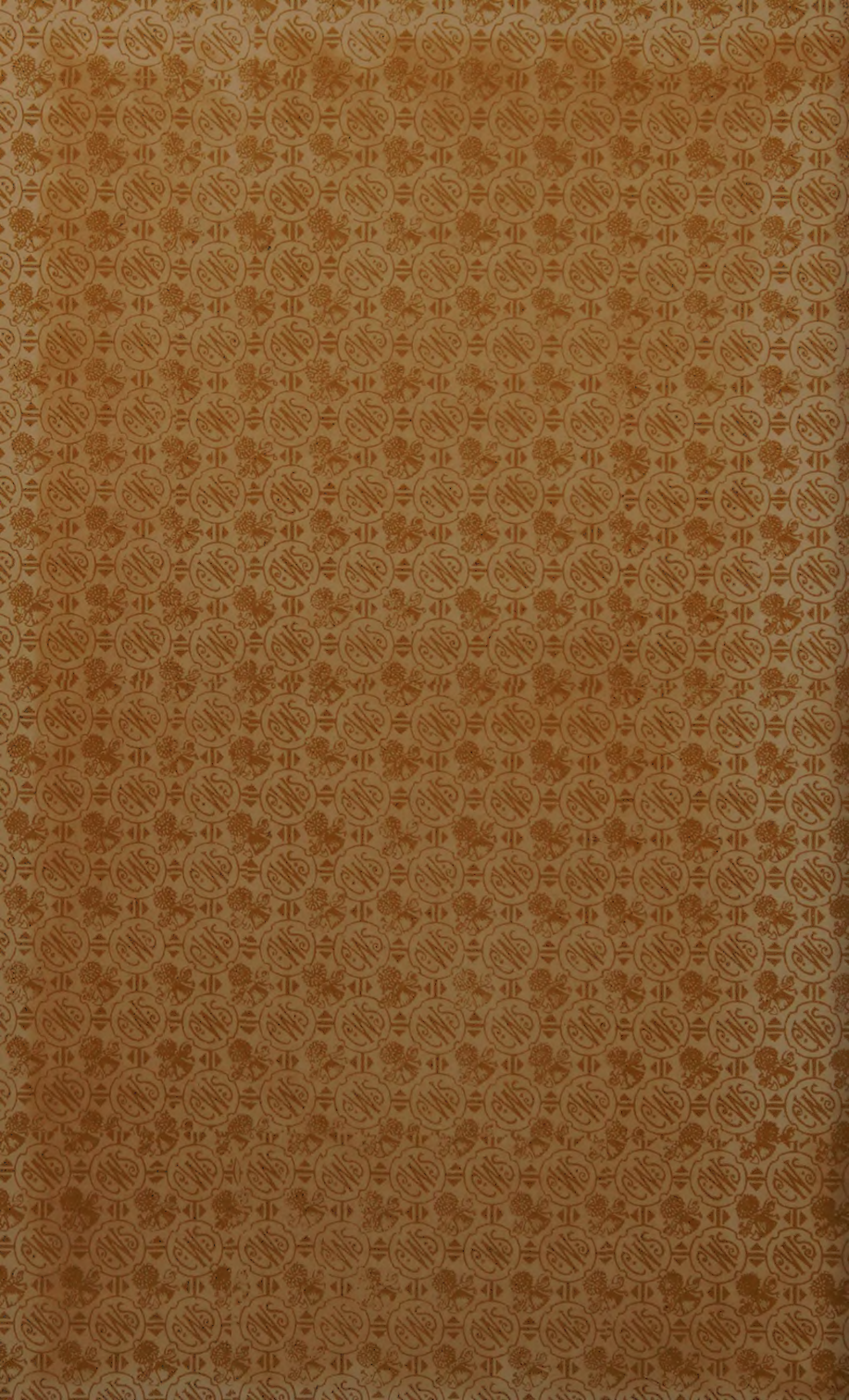
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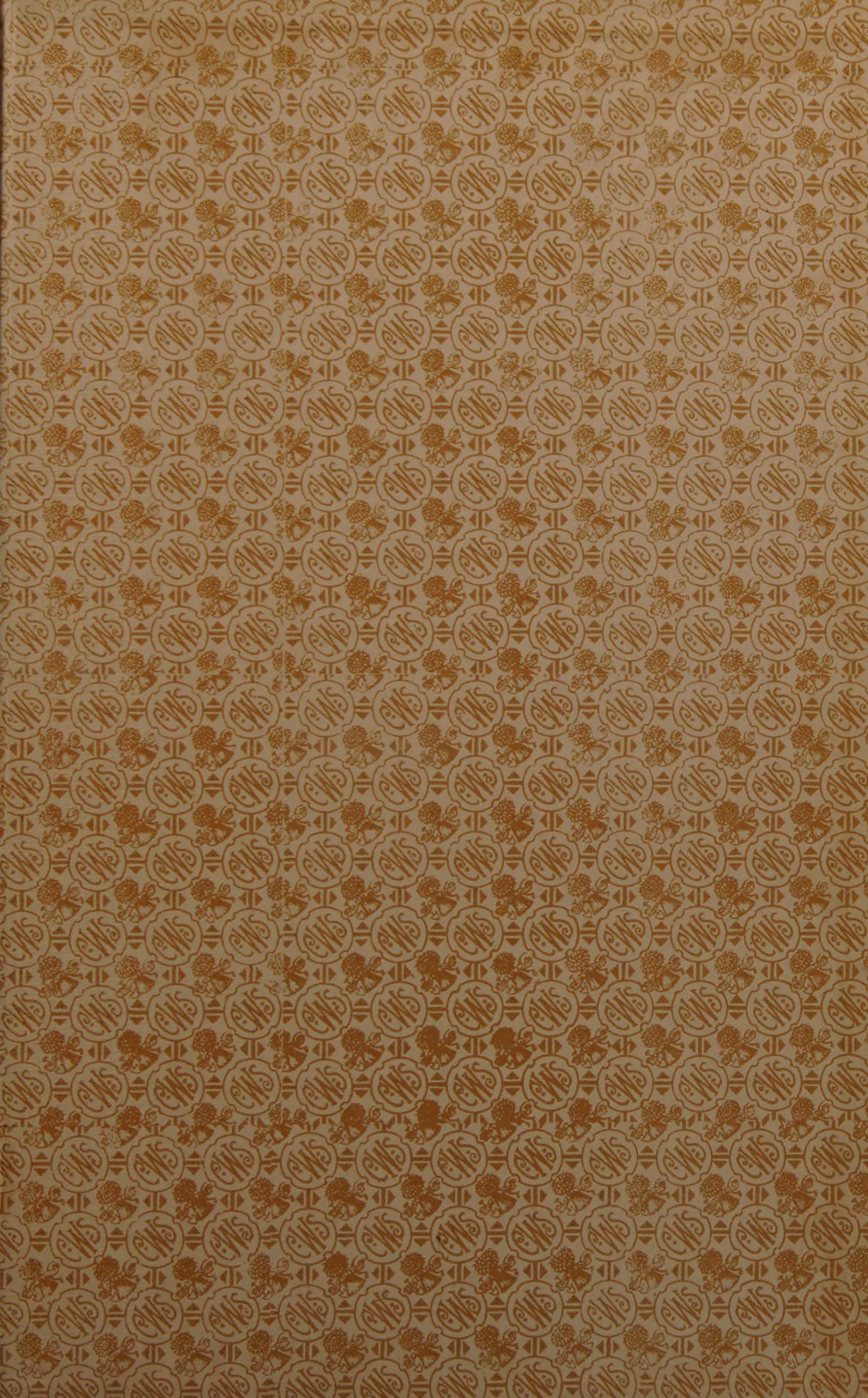
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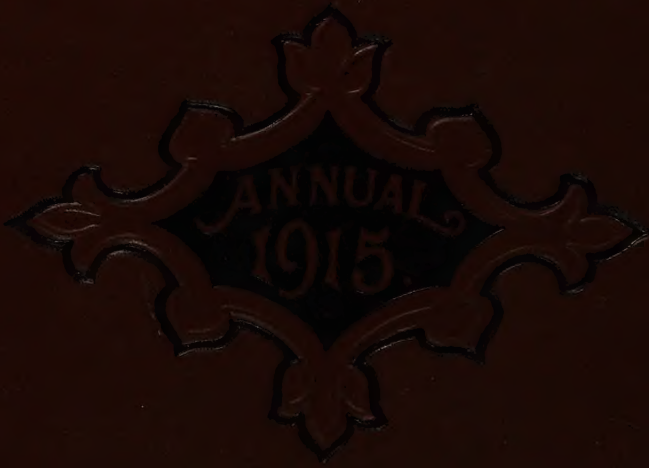
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